CONFERENCE PROCEEDINGS

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OPTIONS and PRIORITIES for a NEW ECONOMIC FUTURE

ECONOMIC FUTURES CONFERENCE WESTERN LAKE ONTARIO GROWTH CORRIDOR

October 6 – 7, 1983

ACKNOWLEDGEMENTS

The success of the Economic Futures Conference has been due to the support and co-operation of many organizations in the Western Lake Ontario Region, all of which have brought their enthusiasm and commitment to the task of ensuring our Economic Future. Thanks are due to the numerous organizations and individuals from all sectors of the regional economy and regional communities for their contributions.

Special acknowledgement is due to a number of individuals and institutions, without whose essential support the conference and follow-up activities scheduled for the coming months would not have taken place. In particular, the Conference organizers would like to thank:

Mrs. Ann H. Jones, Chairman,
Regional Municipality of Hamilton-Wentworth

Robert Morrow, Mayor
Corporation of the City of Hamilton
Chairman, Hamilton Wentworth Regional Economic Development Committee

Hon. Gordon Dean
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Government of Canada

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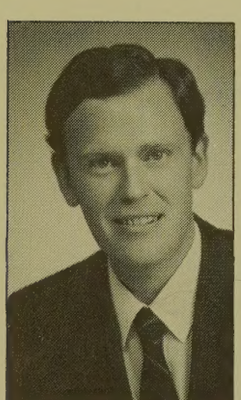
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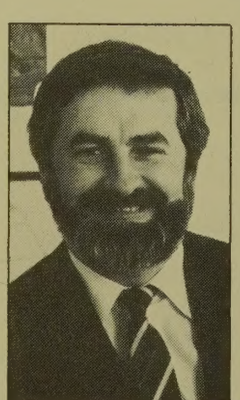
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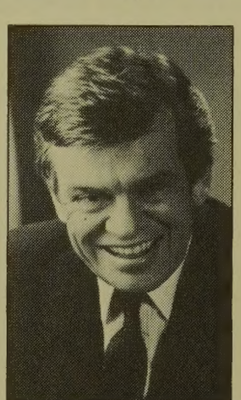
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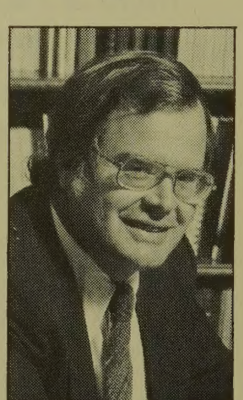
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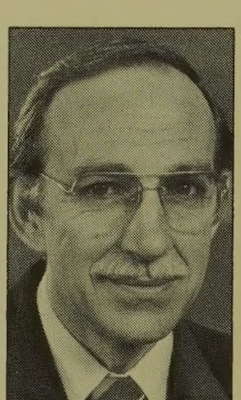
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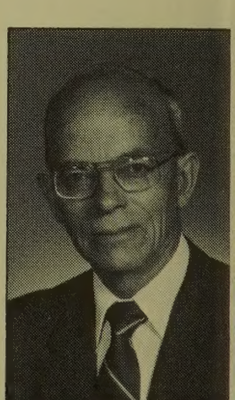
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Background Papers:

The Prospects of Heavy Industry
Dr. D. A. Dawson and Dr. A. A. Kubursi
Department of Economics, McMaster University

The High Tech Option
Dr. J. E. Crozier
V. P. and General Manager, Canadian Institute of Metalworking

Economic Growth from the Service Sector: Prospects for Tourism and Small Business
John Morand
Commissioner for Economic Development, City of Scarborough

Attracting New Capital and New Business
Professor Harry Kitchen
Department of Economics, Trent University

The Labour Force: Human Assets to Grow With
Professor F. T Denton and Dr. B. G. Spencer
Department of Economics, McMaster University

The Implications of Labour Force Dislocations on Employment and Industrial Relations
Dr. H. C. Jain
Faculty of Business, McMaster University

Training Tomorrow's Workers: Educational Opportunities for Youth
A. L. Darling
Registrar and Director of Institutional Analysis, McMaster University

The Challenge of Manpower Training and Re-Training
Dr. R. J. Adams
Faculty of Business, McMaster University

The Industrial Policy Strategies of the Federal and Ontario Governments
Dr. M. M. Atkinson
Department of Political Science, McMaster University

The Effect of Tax Policies in Stimulating New Business Activities
Dr. J. A. Johnson
Department of Economics, McMaster University

Government as a Catalyst for Economic Development
Dr. M. H. Sproule-Jones
Department of Political Science, McMaster University

How Adequate are the Region's Social Services
Dr. D. J. Tucker
School of Social Work, McMaster University

Special Needs: Social Services for Youth and Elderly
Michael Pennock
Former Executive Director, Social Planning and Research Council, Hamilton and District

Special Needs: Social Services for the Disadvantaged
Dr. M. J. Dear
Department of Geography, McMaster University

Neighbourhood Renewal—A Particular Opportunity
Dr. J. Rice, School of Social Work and
Dr. Thomas J. Lewis, Department of Political Science, McMaster University

General Background Papers:

Defining the Challenges of the Economic Future
Dr. R. W. Thompson, Department of Economics and
Dr. M. J. Webber, Chairman, Department of Geography, McMaster University

* Background papers are available upon request from the Department of Public Affairs, McMaster University, 1280 Main Street West, Hamilton, Ontario L8S 4L8 — (416)525-9140, ext. 4571.

FOREWORD

The Economic Future: Options and Priorities

Dr. Peter George
Dean of Social Sciences, McMaster University

On October 6 and 7, 1983, at the Hamilton Convention Centre, more than 500 delegates to the Economic Futures Conference met to discuss the fundamental public issue facing this Region. What is the economic and social future of the Region going to be? What are the options available to us, and what are the priorities that need to be addressed in order to restore the economic and social vitality of the Region?

Almost everyone associated with the local economy and the provision of social services in the community agrees that we face serious economic challenges over the next decade. As a result of both world and domestic events, this Region has suffered a considerable erosion of its economic base, due to major, and perhaps permanent dislocations in the heavy manufacturing industries on which much regional income and employment have traditionally depended. Although there is agreement that substantial restructuring of the economy must take place if the Region is ever to return to its former level of prosperity, there is much less agreement on the best ways to respond to the economic crisis. The lack of an appropriate forum has tended to inhibit development of any wide consensus on an industrial strategy for the Region.

The purpose of the conference was to focus attention on our options for the future, and to begin the process of promoting public awareness and expanding public consultation among representatives of key sectors of the regional community. National and regional leaders from business, labour, government, education, the

professions, and social service organizations were invited to contribute to identifying the economic challenges facing the Region, and to defining the growth and employment options available for future development.

Several broad conclusions emerged from the conference. As the keynote speaker, Professor Christopher Freeman of Sussex University, so cogently argued, western economies will soon enter a new wave of economic growth based on new technologies, particularly in micro-electronics and telecommunications. We have to be ready to capitalize on these opportunities. Yet there are problems of economic and institutional structure which limit the adaptiveness of both the national and regional economies. Some drastic changes will be necessary if the Region is to succeed.

The manufacturing base of the Region requires fundamental restructuring and broadening to be competitive in national and world markets. The economy of the Region will always be associated with a major role for heavy industries, but most new employment opportunities lie in the services sector and light industry. Leadership in this process must come from the private sector, entrepreneurs must be encouraged to identify "niches" where they can take the economic lead for the Region.

Since businessmen, guided by market forces, can be relied upon to make better business decisions than politicians or civil servants, the economic role of government should be a supportive one rather than pro-active. Government should interfere as little as possible in the marketplace. However, many participants singled out local government as having particular responsibility to develop a strategy for attracting business and to enhance the image of Hamilton-Wentworth as a destination for business firms and tourists. A more concerted promotional effort to publicize the Region's strengths and attractions was identified as one priority very much within our powers to implement. A first step towards

identifying their objectives and priorities has already been taken by the Chamber of Commerce which recently commissioned a study of long-term development strategy for business in the Region.

The current economic recession has placed an intolerable strain on community-based social service agencies. These agencies are confronted by the dilemma of shrinking real resources amidst growing and changing demands for their services. In the past, the major focus of corrective or counselling measures looked to the personal problems or failings of individuals and was often of a short-term nature. In the future, these agencies will likely be faced with the even more difficult challenge of helping individuals develop effective strategies for coping with persistent unemployment and underemployment caused by structural economic problems (with future levels of structural unemployment around 11 percent as the norm). Some of these problems will be alleviated by future economic growth, but many will be exacerbated by the rapid changes in educational and skill requirements.

On a more optimistic note, there was a growing realization throughout the conference that there are some institutional resources available to the community that have been under utilized in the past. Several participants acknowledged recent efforts in breaking down the "two solitudes" of university and industry, and the need to increase this trend. McMaster University and Mohawk College both possess research capacity that can be drawn upon by industry, whether through consultancy arrangements or through direct entry into the marketplace, as in McMaster's Canadian Institute of Metalworking, in its new location in the Ancaster Industrial Park. Some provincial government initiatives, such as the BILD program and the IDEA Corporation are helping to promote the university/industry interface. Since the conference, several representatives of McMaster, the Chamber of Commerce, the Region's Economic Advisory Board, and labour have been meeting

with the Hon. John Munro and members of his staff to prepare a proposal to attract the proposed National Centre for Technology, Productivity, and Employment Development to the Region. Location of the Centre here would give a major impetus to the developing interface between industry and McMaster and Mohawk.

The conference was intended to be a catalyst, pointing towards a productive and constructive dialogue on issues, options and priorities in the Region. To bring about an informed public consensus, this dialogue must include representatives of all of the major interest groups in the Region. The delegates to the conference share a major responsibility as leaders in the community to foster that dialogue among their friends and co-workers.

The initiative for change has to be community-based, beginning with the delegates and their constituencies, and culminating in a groundswell of increased public awareness of the Region's strengths and capacities, and growing consensus on the alternatives facing us and the priorities for action. This process must involve close consultation with all levels of government. But we must avoid pointing the finger at government in general or at any level of government in particular. Governments must be involved, but in a supporting role. Ultimately, members of the community must be responsible for identifying options and deciding priorities for the Region.

McMaster University and The Spectator are already on record as being committed to carry the initiative of the conference forward into the next stage. McMaster is convening a working group comprised of several members of the conference organizing committee and the conference theme chairmen who will meet regularly to identify the major conclusions of the conference and act as a conduit for feedback from the delegates. We intend to identify and pull together the essential alternatives into a report which will be called Options: Agenda for Action, which will be widely circulated and serve as the working document for a second

conference a year from now.

The Economic Futures Conference has begun a process which involves all of us in the Region. It will take all of our efforts to move the community towards the fundamental economic restructuring required to bring about future progress. It's time we got on with the job.

PLENARY PRESENTATIONS

KEYNOTE ADDRESS

Professor Chris Freeman
Science Policy Research Unit
University of Sussex, England

Contemporary forecasts of the future levels of unemployment are mostly pessimistic. Even those forecasts which assume a sustained recovery of production, investment, and international trade over the next few years are generally cautious about any major concomitant reduction in the prevailing high levels of unemployment. Many assume a further deterioration in the situation and even permanently higher levels of unemployment. Even the notion that an unemployment rate of 10 percent of the labour force is somehow inevitable has become quite widespread.

Some eminent economists have explicitly assumed that growth rates will remain depressed for a long time. They frequently also did this in the 1930's and 1940's.

> "It is my considered guess", said Paul Samuelson, "that the final quarter of the 20th Century will fall short of the third quarter in its achieved rate of economic progress. The dark horoscope of my old teacher Joseph Schumpeter may have particular relevance here."

Samuelson's reference to Schumpeter serves to remind us that, rather than simply extrapolate the experience of recent years, it may make more sense to try and understand the long-term fluctuations in the behaviour of the economic system.

Indeed, this may help to explain the long-term changes in the opinions and theories of the economists themselves.

Such half-century-long cycles are, of course, primarily associated with the name of the Russian economist, Nikolai Kondratiev. Although many other economists, as diverse as Jevons, Pareto and van Gelderen, had already discussed the phenomenon before the First World War, it was Kondratiev whose name was given to these cycles. During the 1920's, when he was Director of an Institute of Applied Economics Research in Moscow, he made an intensive effort to study and explain them, before he perished in Siberia in the 1930's. It was Joseph Schumpeter who popularized the notion of Kondratiev cycles in the English-speaking world, and who put the main emphasis on the spread of major new technologies as the most important characteristics of such long cycles.

Great controversy still surrounds these cycles or, as many people prefer to call them, "Long Waves" in economic development. Many economists doubt their very existence and some historians adopt them only as a convenient form of historical periodization. The statistical debate about long cycles in the 18th and 19th centuries is likely to continue indefinitely. We only have experience of four long cycles during the industrial epoch and the first of these was almost entirely a British phenomenon. As Kondratiev himself discovered, it is extremely difficult to reconstruct long-term time series of production, investment, employment, trade, prices and interest rates over two centuries, although it is easier for the last three of these categories than the first.

For the purposes of this discussion, it is unnecessary to adopt a position of belief or disbelief in relation to this continuing controversy. It is sufficient to take the agnostic, pragmatic position of van der Zwan that we should endeavour to learn something both from the periods of high boom and from the experience of the severe structural crises, which many countries have experienced in the 1930's and

1980's, and some especially in Europe also experienced in the 1880's. The justification for relating technical change to such problems, is that whereas technology can sometimes move very fast, there is much more inertia in social systems and institutions. It takes decades, not months or years, to adapt the capital stock and the skills of the labour force of our industrial country to the needs and the potential of a major new technology. The process of diffusion of such new technologies is therefore a matter of half a century rather than the span of an ordinary business cycle. Moreover, the diffusion process is seldom one of simple replication of carbon copies of a new product. It almost always involves a cluster of new inventions and innovations, affecting processes, components, sub-systems, materials and management systems, as well as the products themselves. The introduction of railways, of electric power, of the internal combustion engines, or of the computer are all examples of major economic and social transformations involving several entirely new industries, new types of capital goods, components, materials, new skills at all levels, new management attitudes and systems, new education and training systems, new occupational and industrial classifications, new design and development systems, new legislation and new forms of finance, company organization, and ownership. For Schumpeter the long waves in economic life were a succession of technological transformations of the economic system. These necessitated deep structural change - a process which he called "creative destruction".

In this theory the initiative of entrepreneurs, drawing upon the earlier discoveries and inventions of scientists and inventors, creates entirely new opportunities for investment, growth and employment. The profits made from these innovations are then the decisive impulses for new surges of growth, acting as a signal to swarms of imitators. The fact that one or a few innovators can make exceptionally large profits, which they sometimes do, does not, of course, mean that

all the imitators necessarily do so. When the bandwagon starts rolling, some people fall off and profits are gradually "competed away" until recession sets in.

In common with many other economists and historians, Schumpeter stressed that changing profit expectations during the growth of an industry are a major determinant of an essentially sigmoid pattern of growth. As new capacity is rapidly expanded, at some point growth will begin to decelerate. Market saturation, the tendency for productivity increase to slow down within the limits of any particular technological system, the associated exhaustion of economies of scale, the pressures on input costs and prices (including especially the price of labour), as well as the competitive effects of "swarming", will all tend to reduce the level of profitability and with it the attraction of further investment. It will also tend to shift the emphasis of new investment towards process innovation.

New technologies will typically have their origin several decades before their widespread adoption in the economy, not in the immediately preceding depression. The upward thrust to economic growth comes not from the first innovations, which have no perceptible macro-economic effects, but from a pattern of change associated with diffusion investment and the widespread adoption of a new technological system. The Stockton-Darlington railways in 1825 or the Liverpool-Manchester railway had very small aggregate effects on British economy, but the construction of a complete railway network in the 1840's, 50's and 60's, completely transformed the economy.

Carlota Perez has suggested that the big boom periods of expansion occur when there is a "good match" between the new technological "paradigm" or "style" of a long wave and the socio-institutional climate. Depressions, in her view, represent periods of mis-match between the emerging new technological paradigms (already quite well advanced during the previous long wave) and the institutional framework. The widespread generalization of the new technological paradigms,

not only in the carrier branches of the upswing but also in many other branches of the economy, is possible only after a period of change and adaptation of many social institutions to the requirements of the new technology.

The "productivity paradox", which has been the subject of widespread comment, provides some support for this view. During the 1950's and 1960's there was generally a strong association between the growth of output of particular branches of industry and the labour productivity growth of each branch. This relationship was generally known as "Verdoorn's Law" and was often explained in terms of exploitation of economies of scale in the fastest growing branches of the economy, such as petro-chemicals, oil refining, vehicles, electronics and so forth. Both the overall growth and the labour productivity growth depended on the good match which then existed between the low cost energy-intensive technological paradigm and the favourable institutional framework within which it was exploited: hire-purchase arrangements; Keynesian fiscal and investment policies; training and education for large numbers of white collar occupations as well as craft skills: favourable conditions for multi-national company investment and so forth.

During the 1970's and 1980's labour productivity growth has slowed down markedly, especially in the United States. Yet almost every engineer and scientist would agree that the technological potential for productivity increase has never been greater. Labour productivity has continued to increase very rapidly in the electronics industry itself and the potential applications of micro-electronics, computerization, robots and communication technology are innumerable, extending to every tertiary service sector, as well as branches of manufacturing. Productivity slowdown therefore can in no way be explained by the slowdown of technology, but must on the contrary be explained by some degree of social inertia - an incompatibility or "mis-match" between the new technological paradigm and the institutional and social framework. The labour productivity gains during the

period of depression are due not so much to the "Verdoorn" effect as to the "Verdun" effect - the closure or scrapping of the less efficient older vintages of capital equipment, which exist in every industry. They are not yet due to the widespread adoption of the new technological paradigm outside the electronics industry.

Perez points out that Schumpeter did not develop any real theory of depression or of the government policies which might overcome depression. He did rather belatedly acknowledge the need for such policies in very general terms, but he adopted a generally hostile stance towards Keynesian economics. Yet Keynesian ideas were themselves the outcome of a search process stimulated by depression - a search for political solutions which also gave rise to Schacht and to social credit.

I turn now to consider briefly some of the strengths and limitations of Keynes' book. It is often said that Keynes was deeply rooted in the neo-classical tradition of economics and this is no doubt true. Nevertheless, even in his earliest writings in 1913, it is possible to trace his awareness of the limitations of the self-regulating market mechanism.

In the 1920's he wrote "The End of Laissez-Faire" in which he said:

"The world is not so governed from above that private and social interest always coincide. It is not so managed here below that in practice they coincide. It is not a correct deduction from the Principles of Economics that enlightened self-interest generally is enlightened; more often individuals seeking separately to promote their ends are too ignorant or too weak to attain even these."

In 1934 his broadcast was even more explicit:

"On the one side are those who believe that the existing

economic system is, in the long run, a self-adjusting mechanism, though with creaks and groans and jerks and interrupted by the time lags, outside interference and mistakes...on the other side of the gulf are those who reject the idea that the existing economic system is, in any significant sense, self-adjusting...The strength of the self-adjusting school depends on its having behind it almost the whole body of organized economic thinking and doctrine of the last hundred years. This is a formidable power...For it lies behind the education and the habitual modes of thought, not only of economics, but of bankers and businessmen and civil servants and politicians of all parties...thus if the heretics on the other side of the gulf are to demolish the forces of 19th century orthodoxy...they must attack them in their citadel. No successful attack has yet been made...I range myself with the heretics."

This broadcast foreshadowed the publication of his "General Theory of Employment, Interest and Money" in 1936 which at least temporarily was indeed a fairly successful attack on the "citadel", and which argued that "...the duty of ordering the current volume of investment cannot safely be left in private hands" and advocated the "socialization of investment". By this he meant, of course, not public ownership or socialism, but public responsibility for the overall level of investment and employment. He insisted that if private decisions to invest were inadequate to overcome a depression, then it was the responsibility of government to compensate for this deficiency. Interest rate policy probably would not be in itself a sufficient inducement to stimulate the necessary flow.

An inadequate level of private investment might arise from many causes; Keynes stressed the impossibility of purely rational calculations about the future

rate of return from the new investment and the importance of a climate of confidence and the role of "animal spirits". He pointed to the problem of excess capacity even in some industries which had grown rapidly in the previous boom and the problem of temporary saturation of particular markets. He stressed ironically the good fortune of Ancient Egypt in having pyramids and large-scale investment which did not "stale with abundance" and of the Middle Ages in having cathedrals: "Two pyramids, two masses for the dead are twice as good as one, but not so two railways from London to York".

Yet, in the "General Theory" he did not look at the question of investment directed towards the more rapid and effective introduction of <u>new</u> technologies, which is a far more effective stimulus to "animal spirits" than all the wonders of Ancient Egypt or Mediaeval Europe. Since he rejected the orthodox notion that a reduction in wages would stimulate a recovery from Depression, it is surprising that he did not take up the role of new technologies in raising the marginal efficiency of capital. This is all the more astonishing, in view of the fact that he had clearly made the link with Schumpeterian theory six years earlier in his "Treatise on Money". He said:

> "In the case of fixed capital, it is easy to understand why fluctuations should occur in the rate of investment. Entrepreneurs are induced to embark on the production of fixed capital or deterred from doing so by their expectations of the profit to be made. Apart from the many minor reasons why these should fluctuate in a changing world, Professor Schumpeter's explanation of the major movements may be unreservedly accepted."

This passage is remarkable for its unequivocal acceptance of Schumpeter's explanation of the major surges of investment in capitalist societies. It is all the more surprising that neither Keynes nor the Keynesians followed up this recognition

of the crucial role of technical innovation. In fact, in the "General Theory" Keynes regressed to a position of neglect of technology when he introduced the largely artificial concept of a secular decline in the marginal efficiency of capital wholly unrelated to the actual changes in techniques or in the capital stock. Schumpeter was therefore justified in one of the main points of his critique of the "General Theory":

> "...it limits applicability of this analysis to a few years at most - perhaps the duration of the '40 months cycle' - and in terms of phenomena, to the factors that would govern the greater or the smaller utilization of an industrial apparatus if the latter remains unchanged. All the phenomena incident to the creation and change in this apparatus, that is to say, the phenomena that dominate the capitalist process, are thus excluded from consideration."

For the Keynesians it became a matter of relative indifference as to which were the new technologies and the fast-growing industries. They ignored the problem of long-term swings in the direction of technical change from a job-generating to a job-displacing emphasis or vice-versa. It was simply assumed that this could take care of itself so long as aggregate demand was sustained at a high enough level.

In our own programme of research on technical change and employment at the Science Policy Research Unit (SPRU), we have attempted to take into account these long-term effects of technical change, which are ignored in Keynesian analysis.

The research programme has involved:

(1) The identification of the major new technological systems, which might plausibly be supposed to be the engines of any new upswing in the British and

in the world economy over the next 10-20 years. It involves an assessment of the probable direction of technical change in each one of the main sectors of the economy, the potential for entirely new industries and services, and the changing skill and capital requirements.

(2) The identification of the changing long-term pattern of relationships between investment and employment in each of the main sectors of the economy. It is essential to avoid any assumption of a fixed, constant capital/output ratio and essential to take into account the heritage of past capital stock, as well as the employment likely to be generated by future vintages of investment, embodying more advanced technology.

On the first point, in common with most other researchers, our findings point to the overwhelming importance of micro-electronics and the associated information technologies. There is a cluster of new industries which for 30 years have been among the fastest growing in all the leading industrial countries, such as computers, electronic components and telecommunications. But even more important is the fact that this new technological system affects every other branch of the economy, both in terms of its present and future employment and skill requirements, and its future market prospects.

This cluster of innovations has resulted in a drastic fall in costs, as well as vastly improved technical performance in the first place within the electronic industry but now potentially in many other areas. This combination is relatively rare in the history of technology but it means that this new technological system satisfies all the requirements for a Schumpeterian revolution in the economic system.

By contrast, the newer bio-technologies, although they certainly also have enormous future potential, have not yet reached the point where their macro-economic impact could be great enough to carry the entire economy forward in the

next decade or two. It is diffusion of the innovations of the 50's, 60's, and 70's, rather than the first innovations of the 80's, which must provide the main impetus for a new economic upswing. The new bio-technologies will provide very important auxiliary growth areas and they will ultimately revolutionize agriculture, the food industry and the chemical industry; but the main elements of the new technological paradigm for the 5th Kondratiev cannot come from this source.

Still less can nuclear technology play this role. Its applications are extremely limited. Its capital cost is astronomical, so that any large programme would severely aggravate any capital shortage problems. Its cost advantages are even now dubious and there are strong environmental, social and political arguments for limiting its diffusion, especially in the case of the fast breeder reactor.

There are, of course, innumerable other types of technical change, which affect particular processes and products, many of them important for individual industries. But our research, like that of similar work elsewhere, points unambiguously to the conclusion that the dominant new technological paradigm is associated with the combination of micro-electronics, computers, telecommunications and information technologies. This new paradigm may be loosely described as the "information revolution". I now turn to discuss the implications of this revolution for investment and employment.

We have attached great importance in our research to the changing relationship between capital investment, output and employment. In most sectors of the economy, we see the relationship between physical capital and employment as "clay" rather than "putty". In the course of the programme, we have attempted to develop a "vintage model" of the changing capital stock in each of the 40 main sectors distinguished in the Cambridge growth model of the British economy. This vintage model enables us to get some feeling for the potential future growth of employment in each sector under various alternative assumptions about the pattern

of demand, future investment, technical change, and international technological competition.

We did not postulate (as many growth models did) an unchanging capital/output ratio. On the contrary. We expected that as an industry grew and matured, there would be a tendency for capital productivity to decline. This tendency we expected to be associated with a diminishing increment of employment associated with each new vintage of investment. If these tendencies were general, then they could induce stagnation in the economy generally, via two mechanisms:

(i) Diminishing marginal efficiency of capital leading to a slowdown of investment. This was the problem that Keynes described in the "General Theory" but whereas he saw it as a secular trend, we see it as a cyclical problem, and not a permanent one.

(ii) Capital shortage problems in the sense that the rate of investment needed to generate a return to full employment could be so vast as to strain the resources of the capital market, even if the prospects of profit were good.

Both of these problems could be exacerbated by weaknesses in international technological competition, such as those experienced by the UK and Canada in the past 30 years.

If they were not overcome or counteracted by social policies, such tendencies might generate conditions leading to a weak recovery and a prolonged period of mass unemployment as in the 1930's. In our empirical work, in relation to each of the major sectors of manufacturing and services we have found confirmation of these tendencies. Marginal capital productivity has been falling in most sectors of manufacturing for a fairly long time, and international comparisons indicate that this is, by no means, simply a UK problem, but a feature of the world economy.

In the past experience of long waves, such tendencies in mature industries and sectors have been overcome on the one hand by structural change, i.e. a shift in

the pattern of demand towards more labour-intensive sectors, with lower than average investment needs per unit of output, and, on the other hand, by major technical changes in various sectors of the economy, which brought about a rise in capital productivity, reversing the previous trend of the downswing of the long wave.

We certainly would not underestimate the importance of the remaining labour-intensive areas of employment in advanced economies. On the contrary, we would stress that there are certain types of service, which are, in principle, rather labour-intensive, in the sense that direct human contact is the very essence of the service or activity. These include many types of caring and personal service, such as child-care, psychiatric care, counselling services, many types of health care, and (we would say) much education and training. They also include many types of creative work, including artistic, scientific and craft activities.

The provision of these services has depended historically on a combination of growing public provision (often on a non-profit basis), voluntary part-time provision, and marketed private sector services. The growth of such services is, we would maintain, one of the hallmarks of a civilized society, but for that growth to be sustained, and employment growth to continue in this area, then it is essential to sustain high rates of productivity increase in the rest of the economy. This points to the great importance of reversing the downward trend in the marginal productivity of capital in the market sector of the economy.

The reversal of the trend and the impetus to a major upswing of the economy could come, in principle, as it has come in the past, from a major new technological paradigm. Each of the major new technological paradigms in the past has involved a drastic reduction in <u>costs</u>, so that it became managerial and engineering "common sense" to take advantage of the new technology in product and process design and in relation to all types of business decision making. This

occurred with respect to the fall in transport costs and in steel costs during the 19th century, and the fall in energy costs (especially oil) in the 20th century. It is happening now with respect to information technology and micro-electronics.

We would stress the particular significance of capital costs, because of the importance of generating new employment quickly with relatively small increments of new investment. Where this is not possible, and/or when the scale of investment is very large and of an infra-structural style (as was the case for example with electric power and motorways in the past) then there is a very strong case for big programmes of public investment.

However, the stimulus from such neo-Keynesian public investment will only be adequate to generate widespread secondary investment and employment effects in other sectors of the economy, if there are substantial capital-saving gains to be made from such investment. Consequently, one of the most important findings of our empirical research is that of Soete and Dosi that there are very big increases of capital productivity, as well as labour productivity, in some sectors of the electronics industry. Whereas most manufacturing sectors show persistent declining marginal capital productivity over the past ten or twenty years, the computer industry and (to a lesser extent) the electronic component industry show major gains in capital productivity. Since the computer is at the heart of most applications of the information revolution, this is extremely important, especially as there are potentially also very large gains in capital productivity in the communication sector, through the use of optical fibres and fully electronic exchanges.

For such gains in capital productivity to generate widespread effects throughout the economy, it will be necessary to make big advances in the design and development of other types of capital goods, such as robots, sensors, process control instrumentation, and so forth. There is some evidence of parallel gains in these

areas too, but for the potential benefits to be realized, an enormous wave of technical change will be needed in sectors far removed from the electronic and communication industries.

Whether or not such capital and labour productivity gains can be realized throughout the economy depends upon whether the type of problems identified by Perez can be resolved. If changes in the institutional framework can lead to a good "match" with the characteristics of the new technological paradigm, then the potential gains could be realized and a new wave of economic expansion would be feasible.

However, it is essential not to under-estimate the scope of institutional change which is needed. It will involve big changes in the pattern of skills of the workforce and therefore in the education and training systems; in management and labour attitudes; the pattern of industrial relations and worker participation; in working arrangements; in the pattern of consumer demand; in the conceptual framework of economists, accountants and governments, and in social, political and legislative priorities.

Perhaps the most important point is that "intangible" capital investment must now be recognized in its own right as more important than the transitory physical capital investment, which is today the main focus of attention for most managements, accountants and economists. The information system available to firms, government departments and other institutions is becoming the most critical resource.

This applies both to formal information systems and data banks and to the costs of developing, education and training the people involved. The scale of the change in skills and in occupations is still underestimated. There are many types of skilled people whose level of training and qualification is inadequate for the new types of work which they are being called upon to perform, or ought to be able to

perform. This applies perhaps most of all to management at all levels, but it also applies to many types of craftsmen, for example maintenance workers, who frequently lack the requisite combination of electro-mechanical with electronic skills.

The information revolution also affects the whole climate and conduct of industrial relations. In principle, it would be possible to introduce computerization in the style of "1984". It does make possible the most sophisticated centralized type of "Big Brother" time and motion study, whether of sales workers in a supermarket, or of miners operating an underground shearer-loader. But it also makes possible a very high degree of de-centralization, local responsibility and initiative if the computerization and information systems are designed in that way. Rozenbrock's work has shown the overwhelming importance of designing production and management systems, so that they leave a high degree of autonomy, responsibility and skill with the work-force. Otherwise the alienation effect of centralization and de-skilling could generate social tensions even greater than those of the Tayloristic assembly line. The role of "New Technology Agreements" is crucial in humanizing the face of automation and computerization.

Computerization could also facilitate the introduction of much greater flexibility in working hours. In many occupations, flex-time has already been introduced, and the scope for this will be increased. Part-time work and work-sharing are likely to become more widespread. But here again this social change can take a variety of different forms. It could be introduced as a means of depressing wage levels and of reducing social insurance benefits, if part-time workers, and especially female workers are treated as a lower grade type of labour. Or it could be introduced mainly as a response to the desire of many workers, male as well as female, at various stages in their working lives to work part-time, so that

they can spend more time with young children, or pursuing education and training, or other activities. It ought to be possible to humanize working arrangements in this way, but it will not be easy in view of the enormous strength of the old management and union attitudes.

The institutional framework for the 5th Kondratiev cycle is only now being shaped. Most of our institutions and ideologies are still geared to the old technological paradigm of the 4th Kondratiev. Only through social and political debate and conflict shall we determine how we re-shape our institutions and our way of life to match the potential of the new technology and to humanize its innumerable potential applications. The new patterns of employment which will emerge should be of a kind which encourage great variety in hours of work and in continuing education and training, but which ensure to everyone, who is seeking paid employment, the opportunities to work in socially useful activity. This should mean a renewed commitment by society to the goal of "Full Employment", but in a new social context which takes account both of changes in technology and of changes in society. It is our task in the 1980's to find the path to that goal, as the Keynesians did in very different circumstances in the 1930's and 1940's.

Biography — Professor Chris Freeman

Professor Freeman is an economist who holds the Reginald M. Phillips Chair as Professor of Science Policy at Sussex University. He is currently Deputy Director of the Science Policy Research Unit, and was the Unit's Founding Director, serving in that capacity from 1966 until 1982. His research focuses on the interrelationship between long waves of economic change, and the importance of appropriate systems of industrial organization for the application of new technologies to profitable economic uses. He believes that the economic challenge is a long-term and structural one rather than cyclical and short-term, and recommends sustained government funding of basic research as the basis of future growth.

Among Professor Freeman's writings are several books, including (co-author) *The Research and Development Effort in Western Europe, North America and the Soviet Union* (1965); (co-editor) *World Futures: The Great Debate* (1968); *The Economics of Industrial Innovation* (1972, and revised edition, 1982); (co-editor) *Long Waves in the World Economy* (1982); (co-author) *Unemployment and Technical Innovation: A Study of Long Waves in Economic Development (1982).*

THEME PAPERS

Defining the Challenges of the Economic Future

These sessions set the scene for the conference by providing an overview of the environment which will influence the economic future of the region. Experts examined the issues facing the private and public sectors of the economy, the labour scene and the range of social issues accompanying economic change.

Theme I: A Manufacturing Base in Transition
J. J. Shepherd
Chairman, Leigh Instruments Ltd.

Theme II: The Human Resources Dimension
Robert Jenness
Senior Project Director,
Economic Council of Canada

Theme III: The Public Sector Interface
Dr. D. M. Winch
Department of Economics, McMaster University and
Member, Ontario Economic Council

Theme IV: Coping With the Social Impact of Economic Change
Robert Hebdon
Senior Research Officer
Ontario Public Service Employees Union

THEME I

A Manufacturing Base in Transition

J. J. Shepherd
Chairman, Leigh Instruments Ltd.

For about a decade now, I and my colleagues at the Science Council have been talking about "The De-Industrialization" of Canada, with specific reference to its secondary manufacturing sector. What is now conventional wisdom was, at the beginning of that period in the mid-70's, intensely controversial. The decline of value-added content, the highest level of imported manufactured goods in the world, the loss of market position abroad, the abysmal level of R & D, the deficit in end products (now up to about $16 billion); all these issues have since undergone extensive analysis and debate. Although the title of the debate has changed, from science policy to industrial strategy and, now this year, to the all pervasive "productivity", there is no real change in the substance -- the crucial question is the same, "What do we do about competitiveness in world markets?".

Of late, however, and attributable to either innate optimism or premature senility, I have begun to perceive the dilemma of manufacturing in a somewhat different attitudinal context.

At base, the dislocations in manufacturing need to be seen as the outcome of revolutionary improvements in management techniques, as the product of success rather than as the consequence of failure. In the three decades since the Second World War, the capacity of corporate management to operate global manufacturing activities must be counted as one of the brilliant successes of capitalism. The ability to move money, set-up plant, transfer technology, train and manage people, and manufacture anywhere against common design and production standards, is an

astonishing development. As a typical, local example, we have, in Toronto, the Satellite Systems Division of General Instruments, corporately headquartered in New York, with a world product mandated management and engineering group in Toronto, carrying out production in Taiwan, and distributing product on a global basis.

The implication of this revolution, in the context of our topic, is the capacity and readiness to shift production anywhere in the world to achieve marginal cost advantage and, hence, an improvement in competitive position. With this globalization of production to standard design we have witnessed, in Canada and in other more industrialized countries, major dislocations of manufacturing as the value-added content has been sucked out of our industrial system and supplied from elsewhere at lower cost. Virtually anything for which there is a global market will now attract a standardized global production response. The world car, the world camera, the world skidoo engine, the world TV, the world calculator are just the beginning of that process.

When we look at the employment losses in Canada and the shrinkage of the manufacturing sector in the framework of the managerial revolution, we begin to see the problem and the challenge in a different light. Essentially, it is not perhaps as much a short term decline in demand, or any other cyclical phenomonon which pulls a plant out of Peterborough or Midland, or out of the U.S. northeast to the sunshine belt, as much as it is an optimization of production on a continental or global scale. That, I think, not only provides us with clues as to our policy directions, but also suggests that it lies within the capacity of our management system to benefit from the change.

The second facet of this manufacturing scene that needs to be discussed is the extraordinary impetus that is occurring in research intensity, both in terms of new product innovation and with regard to production process improvement. The

consequence of dislocations in traditional manufacturing activity, such as steel, shipbuilding, textiles, footwear, etc., which have virtually ruptured the western economies, is placing increasing emphasis on new technology-based industries such as informatics, where know-how is the competitive edge and where, based on that edge, some kind of market bridgehead position can be established and defined, and where by definition, there is minimal threat from lower cost production. As a topical instance, there are machine translation systems as an outgrowth of artificial intelligence technology.

With regard to process enhancement or productivity improvement, the spread of robotics applications is phenomenal -- from auto spotwelding and spray painting to a widening range of manufacturing operations and sectors. As Dr. Paschler of CGE has put it: "You automate, emigrate, or evaporate out of existence". Together with the advent of Cad-Cam systems, robotics are serving to improve repeatable quality, modify the concept of scale production, and to sharply change skill requirements in the engineering department and on the shop floor. In connection with skill requirements, Dr. Frank Pross, the President of the U.S. National Academy of Sciences, observed recently that, by 1985, one out of every two workers will be looking into a cathode ray tube during the normal course of daily duties. Think of that in terms of the scope of training programs. Without any doubt, the generation, acquisition and diffusion of new technology has become a crucial issue in economic development. The politics of technology is, indeed, emerging as a policy concern in its own right.

As a third environmental factor bearing on manufacturing, the evolution of a world market satisfied by a world product implies a significantly heightened corporate capacity for strategic planning, which, frankly, strikes terror into the heart of the small and medium-sized manufacturer whenever he encounters it. Typically, for instance, in our own avionics activity, we would bid on supplying

equipment on a particular airline fleet, recovering our front end costs across that fleet, only to be heavily underpriced by large corporate competitors who have assumed the winning of a large world market, priced across volumes one could never hope to achieve and over a period one couldn't finance for a global strategy and global resources. Increasingly, under the spur of Japanese competition, long-term corporate strategies with global reach are becoming the order of the competitive day.

Fourth, and finally, one needs to recognize the reality of strategic pricing in the re-shaping of manufacturing. Some countries have to build an industrial base and hard currency has to be won at any price. I would venture to suggest that in many cases, we are contending, as a result, not only with labour cost differentials, but with state-determined strategic pricing which makes the free market as remote and unsubstantial as the holy grail. Brazilian steel, Brazilian auto parts and aircraft, and Russian Ladas may be examples where price may not be linked to cost in anything but a nominal sense. Regardless of cost, the price is what it has to be to win market share.

That there is, then, a transition taking place in manufacturing, generally, and in Canadian manufacturing, in particular, is clearly and painfully evident. In the U.S., a recent poll of business leaders indicated that two-thirds of them believed the change to be structural, and that 86% of them felt that their previous level of production could not be recaptured. In the main, long-run, labour-intensive manufacturing will disappear in North America. The era of large concentrations of working populations tied to single community-dominating plants are over. Tax incentives and grants designed to attract that kind of manufacturing is akin to financing another Maginot Line. Competitions between states and provinces to bid for such operations have been as short-sighted as their exploitation has been cynical.

In Canada, the largely branch-plant character of our manufacturing operations is rendering the transition particularly difficult. The original corporate concept and position of the branch plant, to serve a local and limited market, has not been conducive to achieving or now seeking export penetration. In this country, the general and progressive lowering of tariffs must accelerate the forces of concentration in North American manufacturing. Thus, as the rate of change increases -- in technology, in plant design, in new investment--it is difficult, though not impossible, to discern any locational reasons for manufacturing in Canada. To some extent, as I have noted, this is a result of a branch-plant system which now has little rationale for its existence. But, it is not only that. Our own larger electronic companies, for example, as they approach multi-national status, locate an increasing amount of their production facility either south of the border or further afield.

As in Europe and the U.S., there is, therefore, in Canada some inevitable structural contraction of manufacturing activities in process. The sector will probably never again be as significant an actor in the economy as it was just two decades ago. Unemployment rates at 10% to 12% in Canada, 13% in the U.K., 10% in Italy, 7% in Germany may ameliorate somewhat under the general economic recovery, but are likely to become embedded at that general level as automation, both in the manufacturing and service sectors, begins to take its toll.

It is important, from a resource allocation point of view, to be realistic. The industrial policy objective is not to marginally extend the life of the dinosaur, but rather to create a leaner, more dynamic manufacturing sector which can penetrate external markets rather than cling to traditional attitudes and patterns. As I will re-emphasize, the onus for this new architecture and attitude lies primarily with private sector management. Since Ontario and Southwest Ontario is the manufacturing heartland, it is here that the change has to take place.

As we move through this global and Canadian transition in manufacturing, there are three lines of attack that need to be developed. The first has to do with specialized participation in the world product, the second deals with the special product niche, and the third bears on the breeding rate of new enterprises. All have to do with wider perspectives and longer range vision in our managerial system.

The World Product

The world car is already exerting its impact on Canadian manufacturing. The auto manufacturers appear to be in the process of rationalizing their suppliers and pressing them towards higher quality standards, more dedicated plant, zero inventory supply capability and larger front-end investment. The survivors appear to be assured of longer term supply arrangements. The responsive strategies can only be a much greater commitment of technological and financial and managerial resources to winning supplier positions against international competition, or a major decision to diversify. Some Canadian auto parts suppliers have succeeded, others are ammassing the resources to do so. High risk, higher front-end cost, quicker response capability, more technological capability, are the hallmarks of this market. The situation, moreover, is not unique to auto. The proposed Canadian (Ontario) participation in the European Airbus reflects the same pattern. It implies a transformation of the industry, with specialization being the key-note, and with no room for second best.

Special Products

The second line of attack is the development of special products for

special market niches, large enough in size of market to provide for growth, special enough technically to demand a relatively unique solution, narrowly-focused enough to provide for the sharp concentration of Canadian corporate skills and resources. The line of bush aircraft from DeHavilland, the Marconi Doppler, the Stelco Coil Box, the Leigh Shincom Communication System are good examples. In all of these cases, the special domestic requirement has been sufficiently similar to world market needs that the Canadian product can be successfully and rapidly marketed abroad. Inherent in this approach is a high level of technological capability, together with a strong sense and instinct for world markets. By and large, the fate of Canadian manufacturing lies in the speed with which we can convert to a selective, technology-product related industrial base.

Within this second line of attack lies the world-product mandate philosophy, where branch-plant managers have persuaded their multi-national corporations that it is feasible and profitable to convert the Canadian operations from truncated production plants into innovative enterprises capable of generating unique products for the corporation to sell throughout the world. In Ontario, for instance, Canadian General Electric has, over the last ten years, converted some 40% of its production to world-mandated products from production applied solely to the domestic market. At the level of the humble fry pan, CGE has moved from production of 45,000 units for the Canadian market to 250,000 per year for the world market. My alma mater, Canadian Westinghouse has developed and produced generators for the world markets. Garrett and Litton, in Toronto, have achieved highly-successful growth patterns in advanced avionic products. Market access plus unique technology, and financial staying power have been the ingredients of success.

In this pattern of success, through specialization, there is one industry which, in my view, stands out as a superb example. Canadian steel industry,

Canadian-owned, privately controlled, when almost all other steel industries are the property of the state, extremely strong in terms of technology, has performed brilliantly in a world market of enormous severity. In a North American situation, where U.S. Steel seeks assistance and where Republic Steel is now merging with LTV, the performance of Canadian steel, with its accent on the specialized product, is exemplary, and a model of what we should be aiming for.

Breeding Rates

Given that some 60% to 70% of net new employment comes from companies of less than 20 people and bearing in mind the experience that the bulk of new product innovations stems from small groups, there is, in North America generally, and Ontario in particular, the need to vastly increase the rate at which new enterprises can be formed. There is, in fact, a strong argument for suggesting that the innovative drive in Japan comes from precisely this restless largely unprotected mass of small manufacturers struggling for position with the larger systems houses such as Nippon Electric.

Here in Canada, while we have begun to appreciate the importance of small business in the economy, our tendency has, I think, been to set up research centres and other government vehicles for disseminating technology to stimulate this sector. This process is followed without appreciating the almost intractable task of effectively and continuously reaching this community which almost characteristically rejects bureaucracies, has little strength, and cannot afford to visit, even if it was aware of, central laboratories and other support facilities.

The answer, I think, lies more in the area of financing, of more and more venture capital pouring through the system, of more formal incentives for export, of easier loan facilities. In spite of reservations from some of the venture capital

community, I am absolutely convinced that there is no dearth of capability in Canada, and that, given the increased ability of the venture capital community to work with innovators, a significant stimulation of that sector will occur. The fact is that, given higher breeding rates, given more and more entrepreneurs willing and able to take risk, and to launch themselves into business, the greater the chance of drawing from that larger population other Gandolfs and Lumonics and Electrohomes and Linear Technologies which are the backbone of the reconstructed manufacturing base and of our competitive position in the world. In this connection, in 1969 in the U.S., the introduction of capital gains tax literally wiped out the start-up of new technology companies. Upon successive reductions of gains tax in 1975 and 1981, billions of dollars of risk capital flowed through the system with an instant and positive response in the creation of new companies.

These three approaches, participation in the world product, the special product niche itself, and the sheer increase in birth rate of small companies is where we have to be on the other side of the transition in manufacturing which we are now considering.

This region, in particular, will bear the brunt of the changes that are involved. It is vital, I think, that we do not approach the issue defensively, waiting for plant after plant to fail or relocate, waiting for an up-turn in the economy, waiting for government to act. Somehow, we have to see the inevitability of change, create strategies and organize resources to meet it, and then move out and respond. Let me give you an example in this region.

I referred earlier to the Canadian Westinghouse and CGE drives for world-product mandate, as a means of converting their operations from branch-plant production to central business establishments in their own right. In both those cases, the appreciation of the Canadian scene and its pressures, the organization of the case for change, the pressure on the parent corporation for the product

mandate, come from the management of the Canadian subsidiary. This was also true in Garrett, in Hewlett-Packard, in Litton, and in Black & Decker, the last of which took a product rejected by a sister division in the U.K. and transformed it into a world-beater.

In all these cases, then, it was the initiative and quality of local management that transformed the manufacturing scene and contributed to the future of the economy. The lesson is that there is nobody else to blame if we can't make it work. The underlying thread in these three lines of attack is that, here in Ontario, we need our own managerial revolution to accomplish the transition:

- A revolution which will provide for

    - More flexibility in management;

    - A greater willingness for risk in respect to new products and markets;

    - A greater propensity to concentrate technical and financial resources on specific niches and products;

    - A much greater awareness and responsiveness to world markets;

    - A much greater effort to endure technological changes and to train and prepare employees, as well as managers, for the change;

- A less pig-headed and more positive approach to company strategic planning, treating it not as the domain of the egg head but as the central function of the chief executive office.

In the face of intense competition, Canada, and this region which is so crucial to the entire national industrial economy, has to accept change as a constant, and convert it from a temporary disease to a dynamic advantage.

THEME II

The Human Resources Dimension

Robert A. Jenness
Senior Project Director, Economic Council of Canada

In considering the challenges and opportunities facing our men and women in the years ahead, it is perhaps worth recalling a bit of history that has led to our present situation and has shaped some of our perspectives. Since this year marks the 20th anniversary of the Economic Council of Canada, we have been doing our share of reminiscing particularly with respect to the medium term projections and recommendations we have made over the years. That in itself has been a humbling exercise.

Twenty years ago when the Council was formed, the Canadian economy, then as now, was just recovering from an extensive period of recession. It was a time of considerable optimism. Unemployment and inflation were on the way down, and world trade and domestic investment were recovering. In the decade that followed, the economy's average real growth rate came close to 5 per cent annually. The incomes of most Canadian families rose dramatically, and federal and provincial programs were introduced that improved the health and living standards and educational and employment opportunities of men and women throughout the nation.

The more recent decade, however, stands in severe contrast. Mostly it has been a period of rising unemployment and inflation, slow economic growth, almost non-existent overall productivity improvements, rising protectionist sentiments and increasing disenchantment with some of our political institutions. Indeed the deteriorating record of economic performance, the sense of pessimism and the severity of this latest recession, were reflected in the titles of some of our

recent Annual Reviews -- The Inflation Dilemma, Two Cheers For The Eighties, A Climate For Uncertainty and Lean Times. Canadians were not alone, of course, in experiencing the slowdown of economic activity and trade; virtually all of the industrialized countries and many of the third world nations also were affected. Only the OPEC countries escaped and now, they in their turn, are in difficulties.

Notwithstanding these realities, we would be ill-served by gloom. The title of our 20th Annual Review, which will be issued next week, is On The Mend, and it clearly affirms our belief that the worst is over. The underlying strength of the Canadian economy is re-emerging and there are signs of a new vitality in a number of sectors. That is not to say that history will repeat itself, that the resurgence of the 60's and early 70's will be repeated in the 80's and 90's. Too many things are different. Domestically, our rate of population growth is much lower. The international financial situation is much more fragile, and it is inhibiting the scope for international recovery and trade expansion.

For Southwest Ontario the gains achieved, for instance, through the rearrangement of automobile production on a North American basis, by reciprocal duty-free arrangements, under the 1965 Canada-U.S. Automotive Agreement will not easily be repeated, although possibilities in other manufacturing sectors are under study. Moreover, as long as real interest rates remain as high as they are, inhibiting the profitability of new investment, the recovery now led by the United States could well abort. When you add to this the present unacceptably high levels of unemployment and the backlog of wage and price claims that could easily rekindle another round of double-digit inflation, the prospects facing young Canadian men and women are now quite different from that earlier era.

My subject today is the human resource dimension. Accordingly, it is perhaps worth taking stock of what can happen in two decades. Today, the Canadian population is older, wealthier, more urbanized, more educated and more

ethnically diverse. More Canadians are working and more are unemployed. A generation ago, there were more dependents and fewer workers than there are today. Then, the median age of the post-war baby-boomers was about 10 years, now it is about 30 and while the ranks of the elderly have grown, the major expansion in their numbers is still a few decades away. In one sense, therefore, we are demographically favoured since the swift decline in the proportion of young and the modest growth in the proportion of elderly have meant that working-age Canadians are supporting relatively fewer dependents than a generation ago, and this happy situation will remain for some years to come.

Over the years, there has been a substantial enrichment of Canada's ethnic and cultural mosaic. As you in this region of Canada know so well, immigration continues to form a vital component of our population growth, bringing know-how and productive skills and adding strength and diversity to consumer demand. Since the early 1960's the increase in the numbers of Canadian residents of other than British or French origin has been equivalent to more than half of Canada's population growth. It has included a doubling of the native peoples and a tripling of those from South East Asia. Today, nearly one in every six Canadians was born outside this country. More than ever before, we are conscious of Canada's heritage within the global village. We are part of its commerce and its geo-politics; our young people derive knowledge and tolerance from their ethnic diversity, and pride in that as a nation we offer haven to many escaping from oppression. We must be careful, however, to create adequate economic opportunities and to confront discrimination whenever it emerges.

But perhaps the most profound change has been in the role of women and their increased prominence in the workforce. Remember that it was only in the early 1960's when the U.S. Food and Drug Administration first approved the pill. Then only one in six members of the labour force were adult women, aged 25 and

over. Today, with the decline in birth rates and the increased labour force participation of mothers with young and school-age children, adult women represent close to one in three working Canadians, and each year more than half of the new entrants into the labour force are women.

Canadians today are also, by any standard, much better educated than they were. During the 1960's enrolment rates in post-secondary institutions and community colleges almost doubled. And while the progressive aging of the baby-boom generation has since thinned out the elementary and secondary schools, and to a lesser extent the numbers of full-time university undergraduates, many more working Canadians are now studying and part-time students now account for almost 40 per cent of the total undergraduate enrolment. In addition, there has been a massive diversification in non-university institutions, and full-time enrolment at community colleges alone is now two-thirds that of universities. As a result, Canada has effectively closed the two-year gap in average years of schooling that earlier existed with the United States.

Canadians today, despite high unemployment, are substantially better off than their parents were a generation ago, thanks largely to the economic vigour of the 1960's and early 70's and the increasing labour market participation by women and young people. In the decade to 1975 family incomes, in real terms, rose annually by 4 per cent; since then they grew by only 1 per cent annually with indications that they fell last year. That may not sound much but overall it means that the average working age family in Canada earns, in real terms after discounting for inflation, probably 60 per cent more than its parents. Families, where the wife works outside the home, have benefited the most. On the other hand, with rising divorce and separation rates, many single-parent families headed by mothers which now represent one of every six families with children, are in real difficulties.

Building on the vigour of the 1960's, we enjoy much better income support

for our elderly. The implementation of the Canada and Quebec Pension Plans provided for the first time fully transferable and portable pensions to all contributing Canadian workers. The consequences for Canadians have been enormous, combining universality through the basic Old Age Security entitlement, selectivity through a means-tested Guaranteed Income Supplement and a fully portable earnings-related contributory pension. This package, taken together with private pension coverage and Registered Retirement Savings Plans gives flexibility to Canada's system of income care for the elderly, although it does not make up for severe shortcomings in the private sector.

Canadians have benefited too from the universal accessibility of health care. It was in 1961 that all Canadians became entitled to the same basic hospital care benefits, but even then half of the population was without medical insurance of any kind. Today, despite variations in the delivery systems within provinces, we enjoy a first-rate system that is far more complete and far less costly than the mixed private-public system in the United States. Whereas all Canadians are eligible for public medical and hospital care, in the United States only 40 per cent of Americans are eligible for public hospital care and 25 per cent for public Medicare. Yet a comparison of fees structures there and here show that most surgical and related operations in the United States cost anywhere from two to five times as much as they do in Canada. As a result, Americans wind up devoting a much higher proportion of expenditures to health relative to their gross national product, with much less equal coverage, than we do.

I have dwelt on these developments in the fields of health, education and social security because they are integrally related to the human dimension, embodying a tradition of caring and sharing that binds us together in the federal-provincial confederation. The tradition is implicit, also, in federal-provincial fiscal arrangements under which equalization payments are distributed to "enable

each province to provide an adequate level of public services to its residents without resort to rates of taxation substantially higher than those of other provinces." Made possible by man and facilitated in large measure by economic prosperity and growth, these achievements stand out as being expressive of the very best in Canadians.

They were not, of course, obtained without cost -- Canadians today pay far higher taxes and support a substantially larger public sector than was the case two decades ago. This, of course, is the source of some concern, but it has been a characteristic of most western nations. And in most countries, including Canada, it seems clear that most people, while worried about tax rates, are not prepared to accept lower educational standards, reduced health care or greater medical expenses carried by the sick, fewer social services or less income support for the elderly or the poor. The challenges we face in the future will not be to dismantle the social achievements on which many Canadians have come to rely, but rather to improve their efficiency, target them more effectively, and fulfill the shortcomings in ways which are consistent with and not counterproductive to economic growth and initiative.

This, in turn, presupposes that we can sustain the recovery with an economic performance that will enable working Canadians to look forward to modestly increasing real standards of income, while addressing the needs of a gradually aging population and the adjustments that must be made in a truly more competitive world.

What of the future? We have heard of exciting things happening in manufacturing, with the application of the silicone chip and the use of mini-computers, robots, and the like. The American Society of Manufacturing Engineers reports, for instance, that half the work in automobile assembly will be done by automated machines, including robots, by 1995. There is general recognition that

in many traditional industries automated machinery will continue to displace increasingly skilled levels of the workforce. Even in smaller manufacturing firms reprogrammable microprocessors make it economically feasible to automate where short production runs and frequent changes in machine settings are involved. Beyond that, the new technology promises to alter not only the factory, but the office as well. Satellite communication is now widespread and innovations such as voice-sensitive computers, which can directly transcribe dictation into written text, may be marketable within just a few years. These developments inevitably are raising widespread concerns for job security and work content.

Are we, in fact, on the threshold of an era when technological change will mean that double-digit unemployment is a permanent condition, one in which the skills of workers in declining industries will be poorly suited to the manpower requirements in the new growth sectors? Will those so displaced become little more than relics of a past era, no longer employable or accepting jobs which represent the dregs of the labour market? Conversely, if the efforts of unions and governments to provide worker-retraining into the new skills is successful and new jobs are not forthcoming in sufficient quantities, will young people with limited skills face widespread unemployment if the new jobs are preferentially given to those who have become redundant?

The truth of the matter is that we simply do not know what the future holds. In spite of the relatively unique characteristics of electronic and biogenetic applications, predictions of immediate and massive job losses tend to ignore the market forces which slow the pace of technological change. Many factors limit the speed of diffusion of technological change and thereby mitigate possible employment implications. The size of required investment, the rate of capacity utilization and the relative costs of computerized technology all enter into decisions to adopt automated technologies in place of human skills. While

microprocessor technology may be promising in its flexibility and potential efficiency, industries and firms must be able to afford the new acquisitions. Indeed, it is the stated view of the Economic Council that as prosperity returns, the problem is likely to be less that of severe technological unemployment, although this is not to dismiss that possibility, but rather of a shortage of skilled workers of specialized industrial skills.

Clearly, the application of new electronics engineering in many of the older steel, non-ferrous metal, automobile and chemicals industries which either involve continuous production lines or where microprocesses can perform an increasingly diverse number of tasks more accurately and more productively than are being done today, is putting many traditional jobs at risk. But just as the electronics revolution may replace labour activities, so it is creating a demand for programmers, electronics engineers, and highly-skilled machine workers as well as computer-skilled people generally. What we are witnessing already is that as more people become knowledgeable about computers and in computer languages, they are multiplying the uses to which electronics are put and, therefore, creating a wider variety of jobs. Already shortages of standard software are creating bottlenecks in industry.

Recently an OECD group of experts on technology concluded that developments will be evolutionary rather than revolutionary, that the most rapid developments will be in the area of telecommunications and office automation, that over the next decade computer communications will speed up mobility between professions, enterprises, and economic sectors and require continuous processes of private retraining for manual and office workers.

As the scope for unskilled physical labour in manufacturing and construction shrinks, some individual craft skills also may give way to broader and more technologically adaptable capabilities, with more jobs being filled by women.

One likely development is that in many activities the abrupt distinction between blue and white collar occupations will disappear, and so-called blue collar work will take on added prestige.

How widespread will the technological impact be? In Canada, as elsewhere, as incomes rise, people spend increasing amounts on services. Over the past decade, for instance, over 90 per cent of the expansion of employment was in service-sector jobs. Initially many of these were within the public service, in education, and in health care. But, more recently, the shift in consumer demand has been towards commercially-produced services in restaurants, recreational activities, financial services and the like.

A characteristic even of the commercial services is that a large segment of service-sector manpower remains only modestly skilled, and the rates of productivity increases have been much lower than those in most manufacturing sectors. Nonetheless, Canadian service-sector employees have enjoyed wage increases of roughly the same magnitude as manufacturing workers, with the result that the relative price of most services has increased substantially more than that of the finished goods. And while this price effect has somewhat dampened demand so far, even in the face of the recession, it has not led to a massive displacement of clerical and other semi-skilled service workers in the private sector, although the type of work they are performing is indeed changing.

A characteristic of the service sector is that it comprises many small and medium-sized activities. There will still be, of course, many large and semi-large permanent organizations providing career opportunities, relative job security and fringe benefits for their employees. There is no question that the large corporations, governments, banks, educational and health care systems will continue to provide a major source of job continuity and income security for millions of Canadians; but if the past is a guide, much of the new expansion of jobs is likely

to occur in the smaller establishments in which the life cycle of businesses is shorter and the churning of jobs greater. Many will never provide the job security, career development or level of wages and working conditions associated with the public and sheltered sectors of the economy where unions and management have successfully reached agreement on a whole range of issues. As the recovery takes hold, the flexibility by which most small businesses operate provides a source of strength that will help to resolve the current unease over high unemployment. But, while creating opportunities for those with the skills to adapt, given their extremely competitive conditions and their high-casualty rates, the very dynamics of small and medium-size businesses mean that for substantial numbers of Canadians the future may hold somewhat greater employment uncertainty than in years past.

In OECD substantial study has been given to the structure and the working relationships of enterprises in member countries and the extent to which working practices promote or retard workforce flexibility in response to economic change. There, they have focused on whether the natural desire of management to achieve more flexibility in the use of manpower is encouraging a dual economic status for workers which essentially protects a core of workers with seniority in continuous employment while increasing the use of non-permanent staff who may depend on other work and Unemployment Insurance part of the year. Indeed, already in Canada, there is evidence of substantial growth of temporary help agencies and the fixed-term employment contract arrangements and subcontracting, all aimed at giving management more working flexibility. The result, in effect, is that businesses create buffers of precarious employment as a technique for getting around the rigidities and constraints of a fixed workforce or introduced through collective bargaining or government regulation bearing on working practices and entitlements. And, however much employers criticize the Unemployment Insurance system for its effects on workers' incentives, that system provides a

lubricating mechanism by which the costs of precarious employment get externalized.

There is also the issue of the quality of work. It has been said that computerized technology can create the potential for significant job upgrading, freeing workers from mundane responsibilities and allowing them to take on more challenging roles. But, other situations may become worse instead of better, and much depends on how management and labour work together in adapting to the new technology. Automated systems can decrease the importance of human talents, reducing them to machine-watching and button-pushing. Computerized technologies also enable supervisors to monitor worker performance more efficiently, and while this may improve productivity, if exercised in an authoritarian and insensitive fashion, it can increase the job pressures and grievances of individual employees. Much, therefore, will depend on the success of workers in adapting to and controlling the new technologies in the context of well understood labour-management arrangements.

Indeed, if what I've described does, in fact, emerge, we could be looking at increased numbers of small and medium-size competitive enterprises, greater flexibility in the application of work processes, greater electronic sophistication and more diverse types of jobs undertaken by individuals during their lifetime. We could also be looking at an economy in which the population is aging while at the same time the number of jobs that are part-time, seasonal or of limited duration are growing, and job discontinuities becoming more frequent.

This raises two issues -- first that of providing adequate retraining for workers in their prime years, and second, ensuring that there is continuity and transferability of the entitlements which workers will normally build up through payroll contributions, entitlements to private pensions, medical and dental schemes, and to retraining.

It is natural that individuals balance their curiosity and adaptiveness to change with a desire for security. If the pace of future change is such that fewer and fewer jobs are secure, we may expect Canadians to seek employment security through various forms of guaranteed retraining. Indeed, this was the subject of a study just reported by the Skill Development Leave Task Force to the Federal Minister of Employment and Immigration, entitled Learning a Living in Canada. The report put forward a variety of policy options ranging from the creation of a National Recurrent Education Bureau and an industry-run training fund, tax incentives for corporations, and paid educational leave, to the idea of a Registered Educational Leave Savings Program. The study confirmed several things.

First, the commitment to life-long education, vocational upgrading of skills and retraining is stronger in Europe than in North America. Second, the very diversity of individual situations calls for a range of initiatives, private and public. There is room, for instance, for in-house worker retraining initiatives such as are common in Japan where the concept of life-long employment security is common to large corporate enterprises; but this also presupposes allowing employers wider degrees of freedom in organizing work and allocating tasks relatively free of restrictive work practices and inflexible job boundaries. And, if we are correct about the uncertainty of tenure of many future jobs, much of the retraining -- more extensive than now possible under the National Training Act -- will be required through public programs. How it will be funded, how it will relate to changing employment opportunities and what income support will be available to those taking the training, are challenges that will command our concerns in the years ahead.

A second issue to be addressed has to do with individual entitlements to benefit programs. The success of many unions in negotiating a variety of fringe benefits for their members has been widespread and is highly laudable. Members enjoy private pension coverage and, in some cases, extra life insurance, sickness and

dental programs, and other benefits that provide for greater family security. These benefits also attach workers more closely to their employers. But, they also impinge on worker mobility and their costs may discourage recruitment in favour of using temporary help. Moreover, if workers lose their jobs frequently, they lose all or part of their benefits. One of the weaknesses of private plans paid by employers or hitched to payroll deductions is that often they are not portable. In the United States, for instance, where private employer-linked medical insurance is the norm, it is estimated that unemployment has left close to 30 million Americans with no medical protection.

If, therefore, the future holds less job security for large numbers of Canadians, who more and more will be in their prime-age years, some means must be found to reconcile job insecurity and labour mobility with the security provided by contributory entitlement programs. This is best achieved when all entitlements are vested and portable, which presupposes that they are either government administered as with the Canada and Quebec Pension Plans or that private arrangements exist to vest the entitlements and render them transferable. If, as may be possible, retraining entitlements are added to the list the issue becomes even more complex. The use of private plans has the advantage of keeping public expenditures down, and of giving more flexibility to individual firms administering the funds, but they offer no assurance of universal coverage and the task of providing full transferability in a country where there are eleven separate jurisdictions may prove just too difficult.

You will note that I have said very little about the prospects for substantial reductions in the working hours of men and women in Canada. In general, the actual amount of time worked by Canadians during the work-week and work-year has been declining even though there has been no change in statutory hours or the number of statutory holidays. I am sure the working time of Canadians

will continue to decline, often in subtle ways. The rising incidence of part-time employment, which has grown at more than double the rate of full- time jobs is one example -- others are the increasing use of flexi-time, longer vacations for workers with greater seniority, and shortening the work-life through earlier retirement. As to the concept of work-sharing, it has its place, particularly as a temporary expedient in the face of a cyclical downturn. But it is appropriate only to certain work situations, and must be voluntary. Workers are not likely to accept a permanent reduction in income and over the longer haul work-sharing may prove counter-productive particularly if it means lower worker productivity.

We live in a world of great challenge and opportunity. Increasingly, we are engaged in international commerce, and in the years ahead world trade will likely tilt towards manufactured items and commercial services and away from the mineral, agricultural and forestry endowments that have traditionally provided this country's export strength. Competition will stiffen. Yet, more and more, the concept of comparative advantage is viewed as temporary, based less on fixed resources and more on scientific knowledge and human ingenuity and adaptability. To remain viable, Canadians must adjust to the new technological opportunities and avoid the adoption of self-defeating protectionism or excessively adversarial labour relations. Over the past two decades, we have used our wealth to build important social infrastructures that have contributed to our skills and sense of well-being, and enabled us to endure without social upheaval the worst recession since the 1930's. These are strengths on which to navigate as we steer into the uncertain waters of the next two decades.

THEME III

The Public Sector Interface

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Discussions of the respective roles of government and private enterprise often focus on the two polar extremes. Suppose that they define the ends of a single continuum along which so-called mixed economies could neatly be arranged. At one end of that range would be the free-market system with the role of government limited to the provision of defence, law and order, stable money system and basic public goods. At the other end would be essentially planned economies in which industry is either owned or regulated by government and in between would be economies in which some things are run by government and some by private enterprise. Now, few people in our society would advocate either of those polar extremes.

The interesting questions surround the middle ground in which private initiative and public policy interact. I shall focus on that interaction and argue that the possibilities are not neatly arranged along a single continuum. The number of dimensions of interaction is, in fact, virtually unlimited but it is convenient to distinguish two basic types of relationships, for I shall argue that one is desirable; the other is not; and, in practice, the two are often confused. The first relationship is a structural one. The premise is that private initiative, motivated by self-interest, is the driving force of the economy and the source of production and wealth but the pursuit of self-interest, constrained only by the laws of nature, would come close to anarchy and would not always serve the public interest. To work optimally, free enterprise must function in the right

environment and it is the role of government to provide that environment. Only government can provide a system of law and order, a set of rules that constrain the pursuit of self-interest. While those rules may well be more extensive and more detailed than advocates of lessez faire would condone, they must be expressed as a stable "no" and predictable statement of what individuals may and may not do in their private pursuits of interest.

The second relationship I shall look at is a tactical one. The implicit premise here is that individuals should be persuaded to serve the public interest rather than the private interest. Government is in charge of the public interest. Whenever individuals are perceived to indulge or behave in ways not conducive to service of the public interest, it, accordingly, becomes legitimate for governments to manipulate them by the use of any carrot or stick that will prove effective. Policy is ad hoc and the rules are continually adjusted to encourage the behaviour desired by government.

I shall examine those two types of relationships, in turn, beginning with the structural. Now, whether there must be room for debate and disagreement about the details of policy, it is, today, generally agreed that government does have a vital structural role to play in the economy. No market system could function efficiently without a stable system of money and only government can provide it. The same argument applies to the judicial system, the maintenance of defence forces, the provision of roads and sewers; the provision of such goods and services by government is necessary if we are to have an environment in which private enterprise can function efficiently. Argument here surrounds the details not the principle.

We argue about whether high interest rates are worth suffering to check inflation. We argue about whether our defence policy should include the testing of cruise missiles, and we argue about whether the entrance to Hamilton Harbour

should be crossed by another bridge or a tunnel but there is no dispute about whether implementing the chosen policy, whatever it is, is a proper role of government. The length of the list of appropriate services for government to provide is not governed by any basic laws of economics. It is, for example, possible to have a public or a private health care system, public or private schools and universities, public or private libraries and so on. The proper length of the list is debatable but whatever is on that list constitutes the first structural role of government and the provision of an intrastructure of goods and services in the public sector.

The second, and rather different structural role, is the passage and enforcement of a set of laws designed to curb the possible excessives of private enterprise and to mitigate the hazards and uncertainties that, in turn, feed the optimal functioning of a market system. Private enterprise depends on private property and on honest dealing and we need laws to control theft, embezzlement, and fraud and courts to enforce contracts. There are limits as to how far contracts should be permitted to endanger either the parties to the contract or innocent third parties and so we have laws controlling health and safety standards in the work place and laws to control pollution of the environment.

The third structural role is to create, by law, efficient units in the market place and to constrain their operation. Faced with the scale of modern technology, the individual human being is a paltry entity. Government, accordingly, provides the formation of groups of people that will operate as cohesive entities. Laws govern the structure of corporations and the structures of unions. The only difference between corporations and unions, as we know them, and marauding bands and private armies is that the structure and operations of corporations and unions are constrained by law. When their operations are criticized or government is criticized for restricting their freedom to operate, it is

worth remembering they are creatures of law created because their existence serves the public interest.

We are, of course, free to debate whether the laws governing corporations and unions and the industrial relations legislation that governs their interaction are optimally designed but it remains true that the provision for their very existence is one of the important structural roles of government. Free enterprise in a market system, today, is far removed from the anarchy of lessez faire. The game of free-market behaviour and the pursuit of self-interest is recognized as the best way we know to produce goods and services and to generate wealth but the major players of the great game are creatures of public policy. The board on which the game is to be played is designed by government and the rules of the game are legislated by government. That is the structural role of government. In the game of free enterprise, the driving force is the motivation that comes from knowledge that some will win and some will lose. That is a necessary feature of the game but if the market system is to function efficiently, the outcome may well be gains and losses of such magnitude that they offend our moral sense of equity.

Redressing inequity is the fourth and last structural role of government. Our taxation system is designed not only to transfer from private to public hands the resources necessary for government to play its structural role but also to lessen the magnitude of the private gains and losses that emerge from market forces. Progressive taxes take from the big winners and give to the big losers. The effect is a safety net that protects individuals from deprivation and degradation that would, otherwise, accompany poverty. Unemployment insurance supports those who cannot find a place on one of the teams in the great game while OAS, CPP, GIS and gains support those whose active years have passed.

The structural role of government, then, can be summarized as the provision of an intrastructure of public goods and services, the laws that govern the

formation and operation of the major teams in the game, the statement of the rules of the game, and the protection of those unfortunate enough to be excluded from the great game. Now, I have already suggested that the details of the structural role are debatable and many controversies surround structural policy in all its dimensions. There are no uniquely right answers but there are some clearly wrong answers. The argument that the structural role is the proper role of government does not mean that every measure of a structural kind is wise. Some may well impede rather than foster the efficient functioning of the market system.

Let me mention two well-known examples. The Low Wage Prohibition Act is a well-established part of our structured policy. I call it that rather than the Minimum Wage Act because it does not provide for a minimum wage. The minimum wage is zero. As all too many unemployed people today know, what the law says is that if a person cannot find an employer who considers him worth employing at the minimum wage or more, then he shall be prohibited from working at all. Now, I would not dispute that a wage rate, say $2.00 an hour, provides an annual income that is intolerably low. Any person who cannot earn more deserves additional support from a compassionate society, perhaps in the form of a negative income tax. But I do dispute the implicit assertion that a person who could get a job at $2.00 an hour, doing something useful, producing something useful, and particularly in the case of a young worker gaining experience which will lead to his earning more in future is, instead, better off if the law requires that he be unemployed.

Such a requirement hurts all those concerned. The potential employer is denied a chance to run a viable business providing a useful product or service. Suppliers of materials are denied the market that such businesses would provide. Potential customers are denied the product and forced, instead, to buy goods imported from countries that do permit their citizens to work for market wages and,

most tragic of all, the potential worker, often a young worker trying to get a start in the labour force, is denied the chance to be occupied and to gain useful experience and self-respect and, instead, is required to be idle, bored, and frustrated.

The problem here is that low-market incomes offend our sense of equity. Instead of supplementing the incomes of low-wage workers, we prohibit their employment and must, then, provide for their entire support from taxes. Surely, it is true that if the reality of the market place is such that it can provide low-wage jobs but cannot provide enough high-wage jobs, then, people would be better off with low-wage jobs and income supplements than with unemployment and welfare. A similar problem arises in my second example.

In the free-market place, some people with low incomes may be unable to afford what our society would consider adequate housing. Since in a free market, we should not have large amounts of empty accommodation if some are not decently housed, there must be too little accommodation in total. Possible solutions to that problem would be for government, itself, to build low-rent housing, to subsidize the construction of housing or, best of all, to supplement the incomes of those unable to afford decent housing. Again, the problem is a problem of income distribution but, instead, we kick the market for not doing government's job and legislate rent controls. Such laws require that if it is not profitable to build or maintain housing at rents deemed affordable by the poor, then the housing shall not be built and what exists shall not be properly maintained. A law that addresses a perceived shortage of housing for the poor by deterring the construction of housing is clearly perverse. The accommodation does not get built, the poor do not get housed, and the construction workers are unemployed.

The structural role of government exists because the free market left to itself will not provide all that we want. It does not provide roads and bridges and

they are built by government. It does not always provide equitable incomes and government must redistribute income. But, when the market can function efficiently, all be it not equitably, then, it is folly to suppress it rather than supplement it when we have nothing better to put in its place. What is true in the labour market and the housing market is similarly true elsewhere.

Let me, now, turn to the second type of relationship between the private and public sectors that I call the tactical relationship. The structural role of government was to provide a healthy environment for the market system to function and to legislate the rules of the game. The tactical role involves interference by government in the process of the game. Whereas the first structural role is the provision of public goods and services, the first tactical role is to provide ad hoc incentives and deterrents to participants in the market.

Whether to build and where to locate new plants are among the most important investment decisions that firms must make. The location of a new plant brings with it job opportunities for local workers and markets for local suppliers of materials. The operation of a plant generates income to be spent locally which boosts the market for other businesses in the area. The closure of a plant, of course, has converse effects. The decision to build a new plant or to close an old one is clearly of considerable local interest. Now, in a free-market system, a firm will choose the most profitable location. The decision will depend on the availability and cost of the site and labour force and transport costs to and from the site for materials and products. The most profitable location will, in general, be the optimal location for the economy, as a whole. Firms will be attracted to the so-called depressed areas by low-site values, low wages, and an available labour supply currently unemployed but only if those advantages are not offset by high cost of transport. Thus, the residents of different areas automatically compete for new plants through impersonal market forces.

Now, there is no reason, in principle, why that competition should not be organized through the political process rather than the market process. The residents of an area could choose to maintain high-wage rates despite unemployment and high land values despite idle land. The local government could, then, be used to raise higher local taxes and offer firm subsidies of some kind to locate plants there. But, in practice, this technique is much inferior to the market process because it does not reflect real costs equally across all firms and industries. Established businesses end up paying higher local taxes to subsidize new competitors. The system could be optimal only if the local government offered subsidies to all and raised taxes to pay for them with just that incidence that reflected the consequent rents. This would not be feasible administratively yet it is precisely what the market achieves if it is left alone. The political process becomes much worse if a senior level of government, either provincial or federal, is used to control locations selectively. This could be done either by refusing planning permission anywhere but in the chosen location or by selective subsidies.

Now, I am not arguing against zoning laws that prohibit, for example, the site of a slaughterhouse in a residential area but I am arguing against the use of that technique to direct business to the location that government considers most in need of a new plant. If that location is the most profitable, it will be chosen without government intervention. If it is not, then government will force firms either to locate in high-cost areas or not to invest at all. Under such conditions, the total amount of new investment will be less. If subsidies are used, the cost of sub-optimal location is spread across the economy through taxes with similar depressing effects. The same arguments apply to use of the tax system to give particular parts of the economy ad hoc help in order to frustrate the efficient operation of the market forces.

In a dynamic world economy, demand, costs and technology change

continuously. An efficient economy adjusts its structure to those changes and that adjustment is brought about automaticaly, if sometimes painfully, by the profit and loss signals that ensue from changes in the market circumstances. A government that subsidizes firms in financial difficulty, whether by tax concession or outright subsidy, perpetuates the costs of an industrial structure that is out-of-date, prolongs the agony, and spreads the burden of such folly across the rest of the economy.

Stable policies of interference with market forces are bad enough but fickle policies give rise to further problems. If some firms can negotiate major subsidies for new plants, others will try. What businessman, in his right mind, would undertake a major new investment if by procrastinating he might get a subsidy? If he does proceed alone, only to see a rival firm subsidized, he will know better next time. What firm will incur the cost of changing its product or production process or suffer losses by clearing excess inventory at reduced prices, if by political pressure or the threat of closure, it could get subsidy, tariff protection, or a few months respite from the provincial sales tax so that the costs of its past mistakes will be spread across consumers and tax-payers? Now, there will always be the plea of special circumstances. Every problem is urgent and exceptional to those experiencing it. If problems are analyzed, even by economists, in a partial equilibrium framework, with a short enough time horizon, it is easy to show that intervention by government could save a few bankruptcies or some unemployment in the next few months. That conclusion changes drastically, however, when the longer term consequences of short-term policy are considered. If long-term policy is warranted, then it will be structural in kind. Tactical policy is short term and ad hoc.

The second role of structural policy I discussed earlier is to mitigate the hazards and uncertainties that impede the optimal functioning of a market system.

The effect of tactical policy is to increase uncertainty. Business planning is often long-term planning. The commitment of investment in a new plant is dependent on long-term expectations of profitable operation. Markets and the economic climate are difficult enough to forecast, which is why government has a major structural role to play in providing, for example, a stable money system.

The future will appear much more forboding to businessmen if they must also try to predict the fickle whims of tactical government policy. Long-term business policy is most securely framed in the context of a stable environment. That stability is severely upset and business investment is either deterred or driven elsewhere if the rules of the game are subject to continuous revision by meddling politicians and bureaucrats who have neither the confidence nor the competence to run a planned economy but do believe that they can make an efficient market process better by interfering in an arbitrary ad hoc and unpredictable way.

The effect on the crucial role of government in a market system becomes perverse. That role is the structural one of providing security, a stable money system, an environment in which free enterprise can flourish with confidence. Instead, we find tactical government policy as the major and most unpredictable cause of economic uncertainty. When the rules that determine the outcome of private economic decisions are made in an arbitrary way after commitment has been made to those decisions, then we have a form of discretionary ex post justice that is the very antithesis of the rule of law that constituted the necessary foundation for a viable free-enterprise economy. The advocates of tactical policy argue that it must be right because other governments do it.

Canada is heavily dependent on international markets, they argue, and if other governments have industrial policies, we must have one. Now, I do not find persuasive the argument that we should simply emulate others. If my analysis is correct, and tactical economic policy buys temporary symptomatic relief at the

expense of high long-term economic cost, then my proposed response to other countries that practice it is to let them. If we refrain, Canada will live down the reputation of recent years and be seen in the business world as one place where firms can locate and invest with confidence in a stable and favourable environment.

I pointed out earlier that, while the structural role is the proper role for government, not all structural policy is good and it is similarly true that while short-run tactical policies, in general, are the wrong role, not all tactical policy is bad. There is one place for tactical policy in the role of government and it lies in the field of stabilization policy.

Market systems do suffer from recurrent booms and slumps and the basic pains and message remain valid. Monetary and fiscal policy can help greatly in smoothing the performance of the economy. Monetary policy and taxation policy impinge on the system as a whole. They are not selective in their impact. The concentration of public works expenditures in years of depression is selective but selective within the public sector that is the proper domain of government. There are very real limits as to how tactical fiscal policy should be and attempts at excessive fine tuning can often do more harm than good. But my criticism of selective tactical interference in the market process does not mean that I object to government's role in stabilization policy.

Now, I began this talk by referring to the two polar extreme cases of laissez-faire capitalism and centrally-planned socialism. As an economist, I know the theorems which prove that both perfect competition and perfect central planning are, in principle, capable of achieving optimal outcomes. I also know that, in practice, neither competition nor central planning can be perfect. I do not personally support the case of central planning in Canada at this time. I respect the advocates of socialism for the consistency of their arguments. I similarly reject the arguments of extreme advocates of laissez-faire because I do not accept

that the market process can function efficiently without that insfrastructure of public goods and services that it is the role of government to provide and I do believe that government should redress the extremes of inequity that result from the operation of unfettered free markets. My rejection of both extremes is, I believe, a view shared by most Canadians but if we do follow an intermediate course, then we must define the respective roles of public and private sectors carefully and wisely.

The components can be either blended or muddled. If they are properly blended, government becomes both the servant and the saviour of the market place. As servant, it provides that necessary infrastructure of public goods and services and the stable and predictable rules of the game that together constitute the environment in which private enterprise can prosper. As saviour, government corrects the failures of the free market, stabilizing an otherwise unstable succession of booms and slumps and redistributes income to suit our social conscience. Equity is government's business. The role of the free market is efficiency, but if muddled, those elements of public policy and private enterprise frustrate each other.

The marketplace is driven by the motive of self-interest. It serves the public interest only indirectly through the outcome of market forces. When government practices tactical policy, it tries to be master of the market and the market system functions poorly in a servile role. To those who believe the politicians and bureaucrats can make business decisions better than businessmen, I say be consistent in your arguments. Argue that government should run the economy, advocate a system of centrally-planned socialism, and I shall debate the issue with you on that ground. But if we believe that businessmen, guided by market forces, generally make better business decisions than politicians and bureaucrats, then let government refrain from interfering. Free the market to do its

job and let the politicians and bureaucrats concentrate on playing their own proper and vital role well.

Now, it is a typical cliche to say that we live in interesting and challenging times for I always wonder what other sort of times there ever were. The end of the century is drawing near, but by then the Canadian economy and its place in the world could well be very different from what we know today. Geography and history are combined to provide us with great opportunities. If we organize our society wisely, we can combine the strengths of public policy and private initiative in a complimentary relationship; each sector playing its proper role, each dependent on the other, and each respecting that inter-dependence. If we are foolish, we shall muddle those roles and pit the two sectors in a rivalrous relationship, each trying to outmanoeuvre the other. Such economic civil war could cost us dearly.

I sincerely hope that this conference will make a useful contribution to that process of social choice by providing a forum in which those present can share their respective views in a discussion of where we shall be going and how we should be going about getting there.

Thank you.

THEME IV

Coping with the Social Impact of Economic Change

Robert Hebdon
Senior Research Officer, Ontario Public Service Employees Union

The title of my address today is "Coping with the Social Impact of Economic Change." But, I would like to suggest that we should be concerned not so much with coping with the social impact of the changes which are taking place in our society, as with fighting to ensure that we are able to cope with that sweeping change.

I use the word "fighting" advisedly. Because let's make no mistake about it: we will have to fight to ensure that our future society has the social services it deserves and needs.

In the 1970's, our provincial government signalled an era of cutbacks in social services with the publication of the Henderson-McKeough Report (Special Program Review). The province's approach was to make social services "leaner" and more efficient.

Ten years later, we find the provincial Conservative Party saying, at its recent policy conference, that we had better get ready for a period of "leaner and meaner" social services:

> "Ontario's Conservative Government should be leaner and meaner in providing social programs and in weaning people from a dependence on Government services, partly by ending universal access and basing eligibility on income tax declarations, the provincial party has advised.

About 400 delegates to the Ontario Progressive Conservatives' Biennial Policy Conference spent the weekend drawing up policy papers which Premier William Davis described later as an outline of "the real direction of the party." Mr. Davis picked up the "leaner and meaner" theme in his closing address, warning that although the economy shows signs of improving "we must demonstrate a continuing commitment to restraint and to self-discipline."

Mr. Davis said his administration is committed to fundamental social programs introduced during 40 years of Conservative rule. But, he added that the public assumption that the Government will solve its problems is outdated and that the time has come for people to make a greater volunteer contribution to the community."

If the 1970's was the decade of "lean" in social services, I think the phrase used by the media in reporting on the Conservative Policy Conference is only too appropriate. In the 1980's the new catch-word will be "mean" in relation to social services.

Why do we need our system of social services? I don't think I have to tell people in the Hamilton area about the effects of the economic recession. You have seen first-hand the ravages of unemployment. You have seen for yourself how our criminal rate of unemployment has put an almost intolerable strain on many of this city's relief agencies. The situation might be slightly better in other areas of the province. But, there is no substantive difference.

In Metro Toronto, which supposedly escaped the worst effects of the

recession, the Social Planning Council estimates that one in six residents of that city is living in poverty. Over 100,000 of these people are children. Families -- especially those headed by single mothers -- are being forced to scramble for free food and clothing provided by relief agencies, as their jobs, their unemployment insurance payments and their hopes run out. It is a situation that will sadly be with us for some time. The recession may be over according to the economists. But many working people are asking themselves: "If the recession is over, how come I don't have a job?"

Our society is in danger of creating a permanent underclass of the unemployed. True, a certain amount of unemployment is cyclical in nature. But, with the revolutionary technological changes which are sweeping through society, much of the unemployment which exists now is structural in nature. I can remember a time not so long ago when "full employment" was defined as a jobless rate of four percent. Throughout the latter part of the 1970's, people in the labour movement were criticizing the federal government for trying to redefine "full employment" as a seven percent rate of unemployment. Now, economic forecasters are predicting that long-term unemployment will stay in the range of 11 per cent.

I don't want to stand here and quote statistics to you. We all know the dimensions of the problem. But 11 per cent unemployment means that our economy will be supporting over a million people without jobs for the foreseeable future. Much of this unemployment will be concentrated in Ontario, where we face serious problems in our manufacturing base. One only needs to look at a company like Stelco to see the serious implications for long-term joblessness. How do we respond to this serious problem which, within a few years, will reach crisis proportions?

It will take serious planning and some serious thought. It will require a joint effort from all sectors of society. Everyone must have a voice in planning

how we will cope. Sadly, this effort is not being made. The planning is not being done. Many people are not being consulted. At a time when our social services are going to be called upon as never before to help those in need, we are seeing wholesale cutbacks in this province and in others which have serious implications not only for the care of the needy, but also for our overall social stability.

I want to touch on just three examples of cutbacks which can only be described, to use the new catch word of the Conservative Party, as "mean". The first, which directly affects those who are among the least fortunate in our society, is a proposed change in the income maintenance program which will see municipalities assume a greater responsibility for issuing benefits. The province has proposed that municipalities take over the responsibility for administering the family benefits and general welfare assistance. It sounds, in theory, like a humane idea, at least the way the province sells it. Municipalities are closer to the people, so the province's argument goes. They are better equipped to deal with the needs of those on income maintenance.

But, municipalities have recognized that, while the money might be on the table now, the province's proposal is setting a fearsome precedent which soon might make municipalities, with their smaller tax base, responsible for the program as a whole. There are no provincial guarantees that this will not happen in the future. What will happen to the benefit levels in this case? Will people, who are already living in misery, be forced to undergo even more grinding poverty?

The second example is the changes to the Education Act which are now being phased in. Local school boards will have more responsibility for educating students with a wider range of disabilities, who have been the responsibility of the province up until now. Teachers are very upset by this program, because they are not being provided with any special facilities or help to ensure that the handicapped will get the services they need. Many teachers are simply not equipped to deal

with their students.

Our union has already received a number of pleas for help from parents whose children with learning disabilities have been removed from special schools and placed into a more general curriculum. Without individual care and teaching, these children will not progress the way they could in the special facilities. A person who might have been able to lead a productive adult life with special care will require other forms of support in the community. Human potential will be wasted, and the money saved in one facet of the overall system of care these people require will have to be spent in another, later program.

The third example is the cutback in care to the developmentally handicapped which has been announced by the province. Nearly 1,000 developmentally handicapped people will be moved from six smaller government-run facilities, supposedly to be placed in group homes in the community. The government is promoting its plan under the guise of "de-institutionalization." It's a more humane alternative, they say. But, we already know of examples where, instead of being moved back to the community, people are being shunted into institutions which are much larger, and where care is much less personalized.

Those who do make it into the community are being faced with waiting lists for group homes which number in the hundreds. The government is turning to the profit-oriented sector for help in implementing the program. Some of the developmentally handicapped are being placed in nursing homes and psychiatric hospitals. We know of one case where an individual was sent to a facility for the criminally insane. This policy is not only inhumane. Once again, it is placing a greater burden of responsibility on the municipalities, which are not equipped to deal with it. Who will be responsible for the recreational facilities which will be needed for the increased number of people with developmental handicaps? Who will be responsible for their special transportation, medical and psychological

needs? These are questions which simply have not been asked by the government, let alone answered.

In all three of these cases, the province has shifted the burden of responsibility on to the local level, which is not equipped to handle them. The province also has signalled that it expects the volunteer sector to pick up the slack. I don't want to knock the work that is done by the volunteer sector. The charities, relief agencies, churches and service clubs are doing a tremendous job with limited resources. We can only congratulate them for the solutions they have been able to find in the midst of an increasingly difficult economic situation. But, can our social service system depend on charity? Should we really have to depend solely on the largesse of the churches, the service clubs and associations to care for the elderly, the emotionally disturbed, the unemployed, the handicapped and the ill? Surely, our social services system is the responsibility of society as a whole.

Indeed, if there is any disappointment with the role these volunteer agencies have played, it is that they have not spoken up about the increasing role they are being asked to play. Yes, it is good that people devote their time and money to care for the underprivileged. But, it might be time for these agencies to take a good, hard look at what the province is asking them to do. Are they simply making it easier for the provincial government to divest itself of its responsibilities?

What is the alternative? Is there a way in which we can have social responsibility without bankrupting our governments? Can we afford to maintain a system of social services in a time of economic contraction? I think the answer is yes. But, we need new approaches. We can't think of the social services network as being divorced from the total economic picture. Social and economic planning have to be seen as partners.

I don't want to propose today an entirely new system of economic

planning. Certainly, the labour movement has advanced its own ideas many times in the past as to what can be done to ensure we have economic stability and a humane social services network. But I do want to sound a warning. Our social services system is under attack. If we allow the attack to succeed, we will not be able to cope with the rapid technological changes which are taking place in our economy. And if we are unable to cope, I don't think I have to paint you a picture of the dire consequences we can expect.

THEME DISCUSSIONS

The Spectator throughout the two-day conference had members of their journalism staff attend all the theme discussion sessions. The following is a summary of the comments, ideas and suggestions generated in these discussions as covered by The Spectator journalists.

OVERVIEW OF SESSION DISCUSSIONS

Paul Mitchell
Business Editor, The Spectator

The dilemma for the Hamilton area is clear: Despite a decade when its primary source of prosperity has performed relatively well, it now finds itself concerned about its economic future. The dilemma became clear-cut during the recession of 1982. Unemployment grew to unprecedented heights. Manufacturing firms which have been the backbone for the area's prosperity were losing money. A number of small firms fled for greener pastures.

In truth, recent years have not been good ones for the world economy so it is not surprising that Hamilton should suffer along with the rest. But the background analysis papers prepared for the McMaster/Spectator Economic Futures Conference clearly indicate our difficulties had their origin in more than the global cyclical recession. In fact, as Dr.R.W. Thompson of McMaster's economics department pointed out, economic expansion in the Hamilton area has not kept pace with the rest of the country, or even the rest of Ontario, since the boom years of the 1970s.

In 1981, the area's population was only 4.26 per cent greater than in 1974. The corresponding growth rate for Ontario was 6.49 per cent and for Canada 8.76 per cent. The city of Hamilton fared even more poorly. From 1971 to 1981, the city's population grew by only one per cent, compared with 25 per cent in Burlington. Job growth patterns were similarly disappointing. The area's labour force increased only 3.83 per cent from 1977 to 1981, compared with 9.69 per cent for the province as a whole.

Nevertheless, many of the jobs, particularly in the manufacturing sector, were well-paying. Per capita personal disposable income has been consistently higher here than in the rest of Ontario, although there has been a relative decline since the peak was reached in 1978. Even so, by 1981 disposable income per capita here was still 5.3 per cent higher than in the province as a whole. Capital expenditure in manufacturing also remained fairly constant, varying between 8 and 9 per cent of the provincial total. Although there was a downward trend in the area's share of the provincial total during the early 1970s, this now appears to have been arrested.

These figures for the metropolitan area include Burlington, which has been growing much faster than the city of Hamilton, Dr. Thomson points out. If the city were considered by itself, the comparison with provincial average growth rates would be much less favorable, he warns.

The source of Hamilton's dilemma becomes clear when the actual composition of the area's employment structure is examined. The area relies much more heavily on manufacturing, especially of durable goods, and less on trades and services, than does the province as a whole. In June, 1981, 42.7 per cent of the jobs here were related to durable manufacturing, compared with only 22.6 per cent for all of Ontario. Yet manufacturing jobs have been decreasing since 1974 and the impact of this long-term global trend has been far greater on an area like Hamilton that relies so heavily on them. The growth area for jobs has been in the services and trades sectors in which the area is under represented.

Hamilton's slower than average employment growth can thus be tied directly to its reliance on the slow-growth types of industries. As Dr. Thomson concludes, "the Hamilton metropolitan area has its industrial eggs in the wrong baskets...In our areas of specialization we do well, but we are specializing in the wrong areas."

The theme is repeated in a similar study prepared by McMaster economists Donald Dawson and A.A. Kubursi. While Ontario's economic reliance on heavy industry declined during the 1970s, they point out, in the Hamilton area it increased. Thus the area depends heavily on the economic sector that has suffered serious setbacks in the past few years. And since these are national industries that respond more to national and international developments rather than local developments, it makes it more difficult to find local responses.

The causes of the most recent economic downturn have, of course, been partly cyclical in nature; that is to say, they have been policy-induced and can thus be reduced by policy changes, particularly at the national and provincial levels. But, the authors point out, there are also more deep seated structural aspects, especially affecting Hamilton's most important manufacturing arm: the iron and steel mills, steel pipe and tube mills, smelting and refining and metal rolling and casting that make up the primary metals sector.

First, there is the worldwide over-capacity in steel production, particularly as a result of expansion in Japan, Europe and now the newly-emerging less developed countries like South Korea and Brazil. Compounding this problem has been the fact that global demand for steel essentially stopped growing in 1973. At that point, steel products flooded the export markets, driving out competition with cut-throat pricing that forced the Canadian industry to concentrate on the home market, combined with some continued exports to the United States. A second structural problem is the replacement of steel in many of its traditional uses. Cement and aluminum have grown in importance as possible replacements. It is a trend that's unlikely to change in the near future.

"Fortunately, there is no evidence of technological gap between Canadian and foreign producers," Drs. Dawson and Kubursi find. "Unlike U.S. producers who failed to modernize their plants during the 50s and early 60s when they had the cash

flow necessary to replace outmoded plants, Canadian producers adopted the oxygen process and the continuous casting system."

The general outlook for the industry, they conclude is moderate improvement along with the general economy and limited growth in the long haul. But the industry's performance will depend critically on how well it adjusts to the new market realities. In addressing the necessary response required by the region to diversify its economy, the authors point out that the Hamilton area is well-endowed with adequate labor skills, accessibility to the national and international transportation and communications systems and urban amenities. On the negative side are high pollution levels, congestions of some public facilities and inadequate industrial sites.

"Regional authorities may have to accentuate and advertise the positive aspects and work to contain and correct the negative components," they write. "What is perhaps less necessary is the need to engage in a fruitless competition with other neighborhoods in a negative-sum game where all will ultimately lose."

In the meantime, Dr. Michael Webber points out that it has been Hamilton's blue collar workers who have suffered most from the area's increasing reliance on production and primary metals jobs. Manufacturing employment here reached a peak in May, 1981, but has fallen precipitously since then. By January, 1983, Hamilton had lost nearly 18,000 manufacturing jobs. Dr. Webber, chairman of McMaster's geography department, interviewed a number of executives to find out how businesses perceive the area as a site in which to locate. The most positive response centred on the area's proximity to Toronto, southern Ontario and U.S. markets.

There were also negative reactions which the executives said put them off Hamilton: A perceived shortage of industrial land near the main highways, the lack of business park sites, zoning difficulties and the cost of land. The city, it

seems, has only poorly located land and old-fashioned plants to rent. Hamilton's labor supply is a positive factor, although the apparent militancy of the city's workers drew negative comment, despite the fact that Hamilton's work force is not especially highly-unionized compared with other localities.

Thus, developments in the last decade have reinforced the traditional view of Hamilton as having a blue collar, high wage, highly unionized, poorly educated male work force coupled with a low wage and unemployed female work force in a city dominated by production rather than administration and services. The result is a city that has poor internal transport facilities, limited land accessible to freeways, a relatively old physical environment and a slow-growing economic base. Hamilton grew during the 1960s and 1970s to meet the needs of one industry, Dr. Webber concludes. Unfortunately, its labor force and physical infrastructure are no longer adapted to the needs of today's growth industries.

In short, most economic analyses of the Hamilton area are pessimistic. But to recognize painful realities is not to give in to dismay. Hamilton is not alone in its suffering. Similar symptoms are found throughout the industrialized world and are particularly common in the northeast portion of North America.

In the broader historical sense, we are living in a period of creative destruction as explained by keynote speaker Chris Freeman of the University of Sussex. With new technologies being diffused throughout the system, the next long-term economic cycle - the information revolution - is only now forming. In Hamilton as in the rest of the world, we are still living with structures that were appropriate for the previous cycle. The key is to create the new structures in time.

Edward Preistner, Vice President, Operations, Westinghouse Canada, on the left, and Robert Heneault, Vice President, Administration, Stelco are seen checking last minute notes as the discussion on The Prospects for Heavy Industry is about to begin.

A Manufacturing Base in Transition

Session Ia:

The Prospects for Heavy Industry

This session examined the recent performance and the outlook for the large manufacturing concerns which have been the mainspring of the region's economic activity, with particular reference to the structural and employment patterns which may emerge.

Moderator: R. E. Heneault,
Vice President, Administration
Stelco

- Dr. D. A. Dawson,
  Dept. of Economics, McMaster University
- Wm. Sumpton, Loewen Ondaatje McCutcheon & Co. Ltd.
- H. D. Dent, President,International Harvester Canada
- E. B. Priestner, Vice President, Operations
  Westinghouse Canada Inc.

Session Ib:

The High Tech Option

Manufacturing concerns concentrating on high tech products are increasingly providing a new growth source for many communities. This session examined the relevance of the high-tech option in the context of market proximity, labour skills availability, R&D potential, venture capital and other relevant factors.

Moderator: Dr. A. C. Heidebrecht,
Dean, Faculty of Engineering,
McMaster University

- Dr. W. A. Pieczonka, President, Linear Technology Inc.
- J. A. Pollock, Chairman and Chief Executive Officer,
  Electrohome Ltd.
- D. C. Thom, Assistant Secretary, Industry Branch, Ministry of State for Science and Technology (Canada)
- Dr. A. Z. Szendrovits, Dean, Faculty of Business,
  McMaster University

Session Ic:

Economic Growth from the Service Sector: Prospects for Tourism and Small Business

This session looked at the opportunities and prospects for the service industries as generators of economic growth and employment. This included the development of new service areas, such as tourism, and the potential to supply service to the Toronto region. The session also examined the prospects and challenges facing small business.

Moderator: Rena Blatt,
Small Business Consultant,
Ministry of Industry and Trade
(Ontario)

- Garth C. Campbell, President and Executive Officer,
  Tourism Industry Association of Canada
- Joyce Mongeon, Secretary,
  John Dydzak Enterprises Ltd.
- J. F. Shea, Insurance Broker, Mutual Life Assurance Co. of Canada
- Robert Martin, Executive Director, Downtown Hamilton Business Improvement Area

Session Id:

Attracting New Capital and New Business

Major economic reconstruction will demand expanded capital investment in infrastructure facilities (hotels, tourism activities, etc.) and new industrial ventures. This discussion attempted to identify the possible sources of the needed capital and the community climate and other factors that might influence new capital into the region, the type of promotional and other activities necessary to attract new investors, and the steps that can be taken to improve the Region's competitiveness in total after-tax cost of capital.

Moderator: Brian Costello,
Financial Commentator

- C. J. Byron, Director, Policy and Research, Foreign Investment Review Agency
- P. F. Smith, Assistant Vice-President, Roy Nat Inc.
- Michael Curry, Vice Chairman, Wallwyn, Stodgell, Cochran, Murray
- Dr. C. K. Bart, Faculty of Business, McMaster University

SUMMARY OF THEME I DISCUSSION SESSIONS

Judy Lyn Nyman
Reporter, The Spectator

It seems unthinkable to some that Hamilton may not be a steel town in another decade. But to others, future dependence on steel as a main source of employment could signal disaster for the area. As a region totally dependent on heavy industry, the Western Lake Ontario Growth Corridor (the region) has traditionally put a lot of store in primary metals since it is the largest industry in the heavy industry group. But steel analysts and other industry pundits see replacement, over-capacity, mini-mills and dumping as ominous signs for the future of steel in this region.

Cement seems to be replacing structural steel in many projects. Japan, the less developed countries and the European economic community have great steel-producing capacities which are only starting to be realized. The unknown impact of high technology and the effects of the recent recession on the capital spending sector portend a pessimistic future for the steel industry. And even if the industry picks up to a respectable level, Hamilton could still be in trouble, according to steel analyst Bill Sumpton, who has been studying the market for more than 20 years.

"Future expansion that will create new jobs in the steel industry will move out of Hamilton. Certainly for Stelco, the growth in new jobs in this decade will be at its magnificent new Lake Erie works," he says. "And at Dofasco's new hot mill complex in Hamilton, as it comes into production, new jobs will be created. But even Dofasco has run out of room to expand and the next major expansion will likely

be at a new site on Lake Erie. This means, that in the later part of the decade, employment in the steel industry in Hamilton may be, at best, stable, and perhaps even declining.

"Hamilton may very well be a command centre, however, as new industry proliferates along the shores of Lake Erie. But what to do about the prospect of declining employment in the immediate vicinity of Hamilton," Sumpton says, is a problem that will have to be dealt with.

However, the problem may well be academic since Sumpton does not believe the steel industry will ever return to the peaks it enjoyed in the early 1970s or in 1980-81. And he blames this on the fact that the Canadian steel industry is inextricably interwoven with the capital spending sector, which he doesn't see turning around until the end of next year. Although Sumpton says a capital spending boom---which will help turn the steel industry around---is in its formative stages, he sees only a "healthy" and not an "optimistic" future for steel in Canada.

Accordingly, the region must turn its sights to other industries, keeping in mind the impact high technology will have on all sectors. Before looking at the alternatives to steel, let's examine the high tech option and its effects.

The high-tech option is an extremely capital-intensive venture. If successful, it yields a large increase in productivity. Reality dictates that competitive advantage, new product development, new markets, productivity and profitability will be tied directly to technology in the future. And technological advances will revolutionize not only high technology industries, but mature ones as well. Technology will impact the processes of design, production planning, manufacturing, testing, selling, installing, and servicing, as much as it will on products.

Ted Priestner, Vice-President of Operations for Westinghouse Canada,

Inc., put it succinctly. "The industrial winners in this era of economic imbalance and escalating competition will be those firms that seize and exploit technology as a corporate strategic weapon; an asset that can be managed in support of business and corporate strategy and an attendant need is more research and development."

The greatest concern of those afraid of the unknown advances is that the supremacy of technology will overshadow all other truths including fundamental human needs. But that need not be the case. As long as we change the way we work, as well as the structure of our factories and offices and the way we deploy our human resources, high technology need not be inhumane. In shifting from brawn to brains, we need more training, retraining, flexibility, automation, robotics and, at the same time, fewer assembly lines. To achieve any modicum of success in this move from labour --- to capital intensive operations, we must have closer co-operation between business and labour.

Although the up-front capital costs of high technology and the accompanying training and retraining of employees are high, the capital costs is one-time and the education expenditures should pay for themselves with increased productivity almost immediately. In this respect, Priestner says "The prime mover in the success (of high technology) will be the employee. He or she will have to possess the skills and attitude to pull it off. He or she will have to be skilled and flexible, not only to be able to do several tasks, but in order to participate in the determination of the optimum layout and process for the work station.

"Small-group activity, sometimes called quality circles, will proliferate and will provide the forum for workers to solve the problems that bottleneck the factory or office." And this participation by the employee, Priestner feels, is the key to job satisfaction and economic prosperity. So, if management handles the changes to high technology with sensitivity, existing workers will welcome the changes and new challenges. As far as jobs themselves are concerned, much is said

and written about how high tech will eliminate jobs and lead to massive unemployment and destruction of human dignity. Proponents of high technology say this is a myth; nothing is further from the truth.

As an example, Dr. Wally Pieczonka, president of a Burlington-based silicon chip producing company, says in the field of micro-electronics the silicon chip industry is only 20 years old and employs almost half a million people worldwide. "It virtually is responsible for spawning the electronics industry which in 1982 had a value of $300 billion, employing about 10 to 15 million people. That's greater than has ever been created by any other industry known to man," he says.

As we learn to use new technologies, we will learn to do new things and, in the process, we will create new jobs. To understand the employment potential of high technology, ask yourself what has been the employment impact of the telephone. In addition, there will always be jobs that require judgment, creativity and empathy. There is an increasing need for people in the caring professions as Canada's population ages. Human qualities will always be needed to heal, sell, teach, govern, and entertain. On the other hand, it would be foolish to say that for every job lost to robotics, we can retrain the people to handle the robotics. That's obviously not going to be true, nor will everybody have the inclination or ability to be retrained. So there will always be a sector of the work force that will be unemployed unless we do something radical to change the situation.

Another important aspect of high technology which cannot be overlooked, is its wealth multiplier. If we compare the steel and silicon chip industries, we can begin to understand this better. A few tons of iron ore, about $50 worth, can be converted into a ton of steel. The steel, in turn, is made into auto parts with a final value of about $2,000 or $3,000. So from ore to finished steel product there's a multiplier value of about 60, which isn't bad.

But if you take a spoonful of sand, which costs virtually nothing, and

convert it into a wafer of silicon which weighs about 10 grams and costs about $3, you can process that. Adding virtually no other materials, just human creativity and ingenuity, you can transform it into an array of chips with a potential value of about $3,000. So from raw material to finished product, in this case, the wealth multiplier is 1,000. In high tech, the wealth multiplier from raw material to finished product is virtually infinite or, as Pieczonka says "equivalent to turning lead into gold".

The cash-flow problems affecting many companies today could, unfortunately, spell their ruin tomorrow. The failure to purchase high technology equipment and provide employees with commensurate education, will make these firms non-competitive in world and even domestic markets. But given today's tight money situation, how do we finance this rather expensive high tech habit?

Our Foreign Investment Review Agency, while it has tried over the years to streamline its procedures, is still a hurdle to outsiders wishing to invest in Canada. And even if FIRA was completely simplified, Canadian policy and legislation for foreign investment isn't very well known, or understood, at home or abroad. That is another obstacle we must strive to overcome if we want to attract foreign capital. Our unacceptably-high federal deficit has been an impediment to developing a stable financial market in Canada. To attract financial investment, we must have a favourable climate for it and to accomplish this, we must develop investor confidence.

Such confidence is promoted by political stability, which we have, but also by a sound economy at the time of investment, faith that all levels of government have a commitment to the free enterprise system and to private capital investment, consistency in government policy and an attractive tax system. These are ingredients we lack. However, according to Patrick Smith, an executive with a national business investment capital firm, there is plenty of capital right here in

Canada.

Among the many sources of available money, Smith cites: individuals---wealthy friends, relatives and entrepreneurs in the community---employees, partners, banks, various levels of government, institutional term lenders---life insurance and trust companies---credit unions, franchising, private placement and public placement. Many of these sources depend a great deal on the community climate and whether it encourages business and capital investment. Unless there is a pro-business environment, which many feel does not exist in this area, no amount of available capital will make a difference.

Smith says if the region can overcome its negative business bias and encourage companies to enter and remain in the area, the money will not, in all likelihood, be an obstacle. If Smith is correct, we can begin to put some of the high technology advancements into place. The next problem we face is diffusing this knowledge to smaller companies and throughout our geographically widespread Canadian population.

More favourable and attractive government tax policies for risky ventures would help diffusion through the private sector. If government established a risk-taking economic climate, then industry would be willing to gamble. But tax incentive in Canada is negligible. The alternative might be to allow government high tech service centres to do the job. But would it not be better in a free enterprise society, in one of the world's richest countries, if Canada's larger domestic companies led the way? They have more capital, understanding, capability, resources and opportunity to deal with it than smaller firms. Besides, a business that requires government grants and financial assistance to survive is in trouble and government aid---even in this area---is a short-term solution. Government assistance in the form of tax incentives is the only way governments should involve themselves in business.

The fundamentals of less government, lower taxes, more incentive to work, and increased freedom for the fundamentals of supply and demand to prevail, are very much in step with the day's needs. In the last few years, incentive in Canada for private investment has been replaced by government handouts and shared programs, which don't come close to what the free market can do under a competitive business climate. Certainly the government has a social responsibility when a major employer such as Massey Ferguson or Chrysler is in trouble, and this can't be ignored. But who is benefitting most from the available programs and grants? Is it those who really need them or those who have the human and financial resources to apply for a program? Does it help or burden a small businessman to be approved for a loan or a grant and then have his money held up in bureaucracy? Not everyone can afford interim financing.

How long can the businessmen of Canada afford, as Hamilton entrepreneur Joyce Mongeon put it, "to allow the government to help the buggy manufacturer now that the horse has been retired?" Too much government help results in a loss of self-reliance, initiative and does away with the basic philosophy of supply and demand. Mongeon asks: "Why not create a more stable business environment by not changing the tax laws so frequently? Encourage investment and entrepreneurship by giving tax incentives easily calculated and readily applied. I won't mind risking capital if I know I'll get a whopping good tax break if I'm successful."

So if, as most businessmen believe, a free market with little government intervention, save for more favourable tax policies, will help rebuild the economy to the point where businesses will be willing to spend the money on high technology to remain competitive, then where should that money be spent? If we accept that the steel industry will not be our salvation; that high technology---though not a panacea for our woes---is here to stay; and that government intervention---

regardless of what we think of it---is a fact of life, how can this region maximize its potential? And to what should we turn to put bread and butter on the table in the 21st century?

While manufacturing is an extremely important part of this region's economy, it is equally important to recognize the value of the service industry and small business in general. The very foundation of Hamilton's growth in the past---its almost total reliance on heavy industry and closely-associated industries---is now, to a great extent, its problem. When the steel industry fell on hard times, those other industries are so closely tied to it that the spin-off and ripple effect had a very serious impact.

No one is suggesting the region say goodby to Stelco or Dofasco. They are still an integral part of our economy. But we have to look further afield. We need some more arrows in our quiver. The region should, in the manufacturing sector, develop a niche or world-market-mandate philosophy. We should also look to our brain pool and start developing information services. In addition, our population is growing older and there is an increasing need for people in the caring professions. And, though some may joke about it, we should look seriously at tourism.

Before looking outwards, let's be a little introspective for a moment. One of this region's biggest problems is, and always has been, its negative self-image. It has hindered development and made us think of ourselves as second-class citizens living in the shadow of Big Brother down the Queen Elizabeth Way. The way the region perceives itself is reflected in the view others have of us. So the first thing we need to do is blow our trumpet a lot louder. The immensity of what we have here is one of the best kept secrets in the world. It's time to come out of the closet and boost Hamilton, talk proud, do whatever is needed to get people into the area to have a look. Once they've seen what we have to offer, our assets will

speak for themselves.

Insofar as world markets are concerned, we have to recognize we are competing in a much larger world today. We are facing a dynamic, competitive global economy with the third world countries demanding a larger piece of the world's wealth. Westinghouse's Priestner says Canada has lacked a strategic plan for too long. "We traded our natural resources in order to provide significant foreign exchange to satisfy our appetite for electronics, cars, planes, food, and sunshine. And, more than 100 years ago, Sir John A. Macdonald embarked on a strategy of building a branch-plant industrial society to serve local markets and ensure their success by erecting high protective tariff walls."

Today, a free-trading world is what we need and Canada's tariff walls must come down if we are to compete fairly in the world market. "It is no longer acceptable to mortgage the future of our children by trading non-renewable natural resources for consumption today. Jobs are the issue today. And manufacturing in products and services is where the jobs are. These can be traded on world markets if we have world-class products at competitive prices," Priestner says. We must analyze those market opportunities where domestic supply is advantageous to global competition. Areas such as delivery, quality, technology, scale, fashion, or other niches that benefit from domestic material resource supply, can provide a basis for a successful future.

Donald Thom, assistant secretary to the industry branch of the federal ministry of state for science and technology, says due to the level of foreign ownership in Canada, those products which are world competitive and don't have major domestic natural resource advantages will not only have to be world scale but will also have to establish a level of significant technological difference or advantage if they are to survive with the "Made in Canada" label.

"For multi-nationals, the concept of world product mandates, which give

total world research and development plus manufacturing responsibility to their Canadian subsidiaries for a specific product, have been successfully followed by many major companies here in Canada," he says. "If these companies are to remain in Canada with today's reduced tariffs and high costs of operations, they must achieve world scale manufacturing capabilities through international market and confidence. Domestic manufacturers must find niches by product area. To assure success, each industry and company must carefully identify those markets they can advantageously address due to their own areas of distinctive competence," Thom says.

Because of our technological revolution, people are going to have more free time, even when they are employed. People are living longer so there is more free time after retirement. Disposable income will continue to rise in the long term once the economy fully recovers. The scene is being set for a tremendous growth in tourism and in the recreation industry. We should latch onto that and include it as a major ingredient in our renaissance.

Tourism and travel taken together, form the fastest growing industry in the world today. It is already the second-largest industry in Canada and is forecast to be the largest generator of jobs between now and the end of the century. It is very labor intensive, which is important, because many of the jobs lost in manufacturing and heavy industry will never be replaced. No one is suggesting this region is the sun and fun capital of the world nor should we try to create another Niagara Falls or CN Tower. But no one thought too much about visiting Stratford until someone pitched a tent and put on a play inside.

If we are willing to accept our limitations and work on our positive features, the economic future of this region should be healthy. But we have to be cautious. We have to remember that, while the economy continues to improve and business picks up, we are still years behind the high-flying days of a decade or more

ago. Things are improving, but the only way they will continue to get better for this region is if we stop trying to save the dinosaurs and start looking at new opportunities for the 21st century.

The Human Resources Dimension

Session IIa:

The Labour Force: Human Assets to Grow With

This session examined the broad labour force situation in Canada as a backdrop to the issues faced by the region, covering such items as trends in participation rates (by age groups and sex), skills, redundancies, retraining and re-location policies, etc., and identified the particular human resources strengths available to the region, areas of labour force specialization or under-utilization that offer specific economic growth opportunities, etc.

Moderator: Dr. John Crispo,
School of Industrial Relations,
University of Toronto

- Dr. David Foot, Department of Economics, University of Toronto
- Cec Taylor, Local 1005, United Steelworkers of America
- Don MacGillivray, National Economics Editor, Southam News

Session IIb:

The Implications of Labour Force Dislocations on Employment and Industrial Relations

The paper examined the impact of new technology, changing world markets and economic reconstruction on established labour force patterns and employment and industrial relations.

Moderator: Harry Greenwood,
President,
Hamilton and District Labour Council

- Brian Rushton, Director of Labour Community Services (United Way); Exec. Member, Hamilton Labour Council
- Dr. R. H. Storey, Assistant Director, Labour Studies Programme, and Department of Sociology, McMaster University
- John Walker, General Manufacturing Engineering Manager, Harvesting Division, Massey Fergusson Industries Ltd.

Session IIc:

Training Tomorrow's Workers: Educational Opportunities for Youth

This session examined the educational resources of the region from the standpoint of their relevance as career education instruments, with particular reference to their effectiveness in helping students make better informed career decisions and handle the transition from school to work. The appropriateness of career education resources to the present and projected needs of regional business and industry were also reviewed.

Moderator: A. U. Oakie,
Executive Vice-President and
General Manager,
Hamilton Automobile Club

- Leonard Auger, Chairman, Halton Board of Education
- William Watson, Assistant Director, Personnel, Dofasco
- Marjorie Baskin, Trustee, Hamilton Board of Education
- Ken Hunter, Assistant Deputy Minister, Skills Development Division, Ministry of Colleges and Universities (Ontario)

Session IId:

The Challenge of Manpower Training and Re-Training

The discussion centred on the challenge of labour force dislocations for effective responses in manpower training policies. The session looked at present government programs and re-training facilities in the region to determine their adequacy in terms of the anticipated future needs.

Moderator: Dr. R. C. McIvor
Professor Emeritus, Department of
Economics, McMaster University

- Keith Nixon, Associate Dean, Skills Training, Mohawk College
- Alan Wolfson, Chairman, Ontario Manpower Commission
- David Morley, Executive Director, Employment and Immigration Canada
- Dr. Lily Oddie-Munro, Director, School of Adult Education, McMaster University

SUMMARY OF THEME II DISCUSSION SESSIONS

Brian Christmas
Labour Reporter, The Spectator

WHIPPLE: Shall I tell you the difference, Mr. Dickerson, between you and it? That machine costs two cents an hour for current. It gets no wrinkles, no arthritis, no hardening of the arteries. That one machine is a lathe operator, a press operator. Two of those machines replace 114 men (and) take no coffee breaks, no sick leaves, no vacations with pay! And that, in my book, Mr. Dickerson, is worth considerably more than you are!

DICKERSON: They shoulda stopped you a year ago! Somebody oughta held you down and put a bit in your head and poured in some reminders that men have to eat and work! And you can't...put 'em out to pasture like old bulls! I'm a man, Mr. Whipple, ya hear me? I'm a man -- and that makes me better than that hunk of metal!

--from The Brain Centre at Whipple's,
written by Rod Serling.
for The Twilight Zone (1964).

A journalist would refer to it as a 'syndrome': labour representatives lamented the human tragedies it is creating: an educator could see in it a challenge; to the businessman it's simply a question of survival.

It wasn't really surprising that divergent perspectives produced a wide variety of opinion on the extent and impact that technological change will have on

the socio-economic well-being of people in post-industrial Canada. That was evident during two days of discussion on The Human Resources Dimension theme of the Economic Futures conference. The diagnoses of the magnitude of the problems, and what solution will be required, were as varied as the participants' backgrounds. An observer later said there appeared to be a "painful schizophrenia" between the pessimists and the optimists on how technology will affect the work force and whether society -- particularly the education system -- will be able to cope with or respond to the changes.

Those conflicting sentiments also seemed to extend to whether Canadians will be able to seize today's "window of opportunity", as one participant put it, to solve tomorrow's problems now. Don MacGillivray, national economics editor for Southam News, decried the many "syndromes" that he believes Canadians tend to get hung up on, be it a preoccupation with planning for retirement, better productivity or being highly trained to do today's work. He challenged Canadians to not sit back and fall into another syndrome -- accepting high unemployment as simply an inevitable consequence of economic change.

"The economy was made for man and not man for the economy," Mr. MacGillivray stressed. "We're not modular human beings that get fed into this machine and if we don't fit the machine then we get tossed onto the scrap heap. If (the economy) is not providing jobs and satisfaction for human beings, then it's not working right."

Another participant would use Mr. MacGillivray's reasoning to pose the fundamental questions arising from two days of discussion about the impact of new technology on work and working people.

"Are you going to have a people-oriented introduction of this new technology or are you going to have an economic orientation of all this technology?" Donald MacDonald, the former leader of the Ontario New

Democratic Party told the concluding plenum session. "Should people control the introduction of all this technology or should they become -- as they are to such a significant extent -- the victims of it?"

It became clear during the debates that the fears and battles on the shop floor or office over the introduction of robots or word processors reflect a broader struggle between the social welfare of people against the bottom lines of corporations. According to unemployed lithographer Sam Hammond, it is one in which the worker is cajoled or lured into working harder, becoming more productive to allow his company to be competitive and earn a profit that can be re-invested into plant; only to find that investment made in new, highly productive technologies -- the robots, computer assisted design and manufacturing equipment, word processors -- that ultimately displace workers from the factory.

"Canadian workers are indeed between a rock and a hard place," Dr.Robert Storey, of McMaster's Labour Studies Program, told a forum dealing with the implications of labour force dislocations. "At the same time, they're being castigated for low productivity, they're being sacrificed in the name of productivity. On the other hand, we're being told Canadian industries must modernize their production processes if they are to remain nationally and, more importantly, internationally competitive. On the other hand, the technologies that Canadian industries must adopt in order to be competitive bring with them the spectre of fundamental changes in the nature and the organization of work -- and massive unemployment."

Dr. Storey contended that new technology is allowing for the "flight of capital" on a worldwide scale. Witness the phenomenon of workers facing concessions on their wages and benefits under the threats that companies will move factories to other countries, where labour can be bought for less than 25 cents an hour,he said. "There is an international division of labour that is emerging."

But industrialists would counter by saying that without the new technologies, Canadian industries -- and jobs -- won't survive in the world marketplace.

"The survival of North American companies and North American way of life is, in a way, at stake because now. . . it's going to global manufacturing," said John Walker, general manufacturing engineering manager, Harvesting Division, of Massey Ferguson Industries Ltd. "Job creation will only happen if there's an opportunity for reward. If you cannot sell your widgets, there's no sense making those widgets."

He said union and management must end their confrontational customs and develop better relations to deal with the future problems together. Quality of Working Life programs are one such tool to harmonize relations. But unions have been reluctant to get involved with QWL,he said, for fear they could undermine the union executive. While wondering aloud if the cost of retraining workers should be borne by industry or by society as a whole, Mr. Walker at the same time argued against more government involvement in the workplace.

"Joint technological change committees should be joint and not imposed on the parties by some faraway bureaucrat," Mr. Walker said. "Rather than provide for omnipresent government in more and more phases of the Canadian work place, we should provide the environment, through education and training, wherein union and management talk to each other."

That utopian goal, however, didn't allay concerns of labour representatives who painted a bleak future with the coming of new technology - high unemployment, a polarization of jobs and income, loss of skilled, well-paying and challenging work, elimination of the middle class plus a myriad of social problems up to and including more suicides. Bryan Rushton, of Hamilton and District Labour Council, stressed that the social welfare of people should take

priority over a company's capital and economic demands. The social consequences of this new "technological revolution" will make the industrial revolution of long ago seem like child's play, Mr. Rushton predicted. The problems and solutions will have to be addressed by all segments of society, including industry.

"The semi-skilled blue collar and low level white collar jobs are the most threatened by the new technology," Mr. Storey continued. "The vast majority (of new jobs) will bear little or no relation to the jobs that have been displaced and have been transformed. They will pay substantially less; they will offer scarce room for mobility; and the middle range of jobs are going to disappear." He predicted women will become the "shock troops" as management adopts new labour saving techniques to cut administrative costs in the office. Alan Wolfson, chairman of the Ontario Manpower Commission, took an opposing view to that scenario in another forum that dealt with "the challenge of manpower training and re-training."

He said workers in traditional industries will be hurt the most by new technology, while women will generally be more insulated from these job disruptions. Statistics indicate unemployment rates for women haven't been rising as fast as for blue collar working men. "The robots are more likely to replace men, than the word processors are to replace women," Mr. Wolfson said.

In fact, several panelists and audience participants saw some good in new workplace techniques, if only to improve the quality of working life. While the production equipment may eliminate jobs - including dirty, hazardous and monotonous work - Mr. Walker stressed "it's not the end of the worker in the workforce. There are some bugaboos that people dream up and...and unfortunately they don't have first hand information." Added Keith Nixon, associate dean for skills training at Mohawk College: "I don't think it's all doom and gloom. I think we have a challenge."

How will Canada tackle that challenge? More importantly, who will take the initiative to ensure the country's wherewithall will be equal to the task? Discussion on possible solutions produced no more clearer consensus than the debate over the extent of the problems awaiting workers, industry and government in post-industrial Canada. Is it simply a shorter work week or longer vacations that will help reduce the country's 11 per cent unemployment? Or is work sharing the miracle cure? Still others stressed the need for adequate training and re-training programs to help the unemployed and future workers adapt to the changes.

Gerry O'Connor, a business agent with the International Brotherhood of Electrical Workers in Hamilton, said his and other unions have pursued a shorter work week with no cut in pay for years. "It's not that we want a reduced work week, we have to share the amount of work that's out there," he said. It was a point he underscored with an all-too-familiar statistic - half of the 1,200 members of his IBEW local were unemployed in the fall of 1983. The building trades generally faced 50 per cent unemployment at the time.

John Crispo, of the University of Toronto's school of industrial relations, countered that a reduced work week with no cut in pay could hurt Canada's economy. It would drive up production costs, forcing companies to raise their prices. And that would harm the competitive position of a company. "There's no free lunch any more. That's one of the things we have to face up to - and Hamilton in particular," Mr. Crispo said. "We're going to have trouble maintaining our standard of living unless we remain competitive."

The concept of work sharing - a notable example has been the federal government's plan that allows employees to work three or four days per week with unemployment insurance covering their one or two days off - has been generally rejected by unions because it is seen as "sharing the poverty".

But Canadians should not reject the idea out of hand, if it will put a dent in

unemployment, said Dr. David Foot, economics professor at the University of Toronto. In fact, many Canadians probably wouldn't mind having more leisure time on their hands if it was not for career and economic barriers. "There ought to be more opportunities in our society for people to choose the length of the work week they want," he said. "The provision for part-time jobs in society is not there."

In calling for more flexibility by society to cope with changing employment patterns, Dr. Foot said there are ways that employees could work fewer hours, thus potentially freeing up more work for the unemployed. For instance, young people could be gradually introduced into the work force - rather than graduating en masse each June - if they combined the last year of school with periods of on-the-job training. At the other end of the spectrum, older workers could be permitted to work fewer hours as they gear down for retirement. For those in between, Dr. Foot said, there are often disadvantages to working part-time. Professionals for example, might compromise their careers or sacrifice a promotion if they chose to work part-time instead of being tied to their jobs eight hours a day, five days a week, 48 weeks a year.

"It doesn't bother me if the new technology means we end up working less," Dr. Foot added. If the new production technologies increase output and generate more income, then that should not mean a drop in our standard of living, he said. He also argued that the new tools flooding the work place may inevitably lead to more leisure time - and not necessarily more unemployment, as many have predicted.

A major thrust this decade will be the re-training of semi-skilled workers but a question remains: What do you train for? A background paper on the training challenge painted a picture of government job creation and training policy that seemed to be zigging when the real world was zagging. Despite the overall pessimism for workers over the next 10 years, Dr. Foot held out a glimmer of hope

for today's adolescents who will have a good chance at finding jobs by the time they are ready for the working world later this decade. It's today's youth - those who will be in their late 20s and early 30s by the end of the decade - who will face the bleakest prospect for employment, due in large part to the sheer numbers competing for jobs.

"We had all these people coming on the labour market we had to find jobs for. It's not surprising we didn't succeed and the unemployment rate went up," Dr. Foot said of the 'baby boom' generation which hit the work force during the 1970s. His predictions raise a whole new set of problems for policy makers: "We have a certain attitude towards training; it's for young people. But the unemployment is going to be among the 25 to 35-year-olds in the coming years."

Indeed, there was some suggestion that even students in today's primary and secondary schools aren't receiving the type of education they'll need in tomorrow's computerized work places.

Four per cent of elementary teachers and 7 per cent of secondary school teachers are "only approaching being computer literates", said Marjorie Baskin, a trustee for the Hamilton board of education. "Young people fortunate enough to pick the right parents are learning information processing at home. The vast majority are less fortunate and are slipping further and further behind. We are creating an elite and a lower class right in the classrooms."

The inadequacies don't end at the school yard. The training and education policy in Canada, however well-intended, has not been sufficient to produce the type of system that will be needed in the years ahead, according to a background paper on "The Training Challenge", by R.J. Adams, of McMaster University's Faculty of Business. As far back as the 1960s, the education system was cranking out liberal arts graduates - people who now have few marketable skills - while skilled craftsmen, such as machinists and tool and die makers, were being

recruited by industry from Europe.

In the late 1970s provincial and federal governments reacted to the shortages in skilled trades by spearheading community-based industrial training advisory committees, of which the Hamilton committee (HITAC) has become a model, bringing together labour, business and educators to find out what the community needs in the area of training.

"The preponderance of research suggests that training is most effective when it is the result of the combined efforts of educators and representatives of labour and industry working together in concert," Mr. Adams wrote. "Through HITAC and the Education-Industry Council, Hamilton is better served in this regard than most Canadian communities. Nevertheless, only a small minority of Hamilton companies are involved in these organizations. Most employers limit their involvement in the training system to complaining about the inadequacies of public policy."

To encourage expansion of apprenticeship programs,the federal government established the Critical Trades Skills Training (CTST) to offer incentives to employers for training workers in the needed skills, rather than going overseas for craftsmen. "However, it took several years to develop the program and to put it into operation," Mr. Adams said. "During those years, skills shortages were a continual problem. Indeed it is ironic that CTST only hit full stride in 1982 when massive layoffs, caused by the deep recession, made moot the immediate need for skilled workers."

That point was illustrated by Mr. O'Connor, who said his IBEW union local received five applications per week for apprentice electricians in 1983. "There's no hope I can give these people," he said. "There's no place I can send them." A sad irony of the situation is that society has often forced people into a trade during the boom times of a few years ago "and now they're all out there (unemployed) and they

ask 'what did you do to me? It's almost like a lost generation," Mr. O'Connor said.

While the government policy for training and re-training may prove beneficial in 1985-86, when the demand for skilled workers is expected to re-emerge strongly, Mr. Adams said, "the process which generated the program is a ponderous one. Surely there must be a better, more flexible scheme which will permit the primary parties to react quickly and effectively to issues as they occur. Centralized government action in an area like training, which is dynamic, volatile and in constant flux, is not the final answer." In the long run the training system will achieve its potential only if labour and management develop programs to which they are both committed."

If there was any consensus during the discussion, it was that government, industry and labour will have to work together and adapt to changing work patterns, especially with new technology changing the nature of work.

"You can't be in the forefront of technology, without being in the forefront of change," said the U. of T.'s Crispo, "and change causes disruption and people get hurt by disruption. When we have no programs in place to help the people that are hurt by disruption we're going to get resistance. The thing that hangs me up - I think has all of us hung up - is what the devil do we train them for? What do we train Gerry's 50 per cent (unemployed) for? I don't think we know."

As Canada enters a new industrial age, society will have to put aside its "painful schizophrenia" and get down to solving the problems of unemployment and making sure workers will have the necessary skills to work with the new technology. "There's an awful gap to be bridged there between unemployment and the alleged potential of the new technology," said the NDP's Donald MacDonald. "It has to be thrashed out to get that appropriate balance out there between the economics and the people who should be served by the economics."

On the left, Dr. John Crispo, School of Industrial Relations, University of Toronto and Donald MacGillivray, National Economics Editor for Southam News, are shown deeply involved in the discussion on the topic of Labour Force: Human Assets to Grow With.

The Public Sector Interface

Session IIIa:

The Knowledge Industry and Industrial Development

This session examined the interface between McMaster University and businesses in the "Corridor" with emphasis on research and development needs and constraints, the use of University resources, and manpower development programs.

Moderator: Dr. D. W. L. Sprung
Dean, Faculty of Science
McMaster University

- Dr. D. R. McCalla, Vice-President, Faculty of Health Sciences, McMaster University
- Dr. J. S. Kirkaldy, Director, McMaster Institute for Energy Studies
- W. A. H. Filer, President, Hamilton Engineering Institute; Past President, The Canadian Society for Civil Engineering
- H. Ian Macdonald, President, York University; Chairman, IDEA Corporation

Session IIIb:

The Industrial Policy Strategies of the Federal and Ontario Governments

The session examined the current industrial policy strategies of the two senior levels of government. Items discussed included industrial sector strategies, micro and mega projects, and the competitive constraints posed by the actions of other jurisdictions.

Moderator: Dr. A. C. Frosst,
Assistant Vice-President Research Services,
and President, C.A.R.E.D., McMaster University

- Bryan Davies, Assistant Deputy Minister, Office of Economic Policy, Ministry of Treasury and Economics (Ontario)
- Paul Kovacs, Economist, Canadian Manufacturers' Association
- Dr. A. A. Kubursi, Department of Economics, McMaster University
- Pierre-Paul Proulx, Assistant Deputy Minister, Regional and Industrial Policy and Small Business, Ministry of Industry, Trade and Commerce (Canada)

Session IIIc:

The Effect of Tax Policies in Stimulating New Business Activity

Tax "holidays" and other forms of tax incentives are devices used frequently by many jurisdictions to provide a competitive advantage in attracting new business and industry. The prospects of using tax-based incentives for developing new business activity in the region were discussed in this session, together with an assessment of the federal, provincial and regional policy questions underlying the availability of appropriate tax incentives.

Moderator: Robert Cordingley,
Partner, Ernst & Whinney

- Alastair Skinner, Partner, MacGillvray & Co.; President, Institute of Chartered Accountants of Ontario
- Anne H. Jones, Chairman, Regional Municipality of Hamilton-Wentworth
- Jordan Livingston, Jordan Livingston Furs Ltd.
- Hon. Roly Bird, Mayor, City of Burlington

Session IIId:

Government as a Catalyst for Economic Development

This session examined the respective roles of the various levels of government in providing a stimulus and climate for economic development. Topics covered included direct initiatives from government both as an employer and a producer of goods and services, the provision of physical and social infrastructures, the removal of business investment constraints in relevant public policy areas, and the introduction of effective marketing and promotional activities to "sell" the region to prospective new industries.

Moderator: David MacKinnon,
Director, Economic Development Branch,
Ministry of Treasury and Economics (Ontario)

- Hon. Robert Morrow, Mayor, City of Hamilton
- J. K. Grant, President, Quaker Oats Company of Canada Limited
- David Barrows, Director, Industrial Policy and Analysis Branch, Ministry of Industry and Trade (Ontario)
- John Agro, Chairman, Hamilton Harbour Commission

SUMMARY OF THEME III DISCUSSION SESSIONS

Adam Mayers
Reporter, The Spectator

The issue at this session was not whether Canada should have either a free market or a managed economy, because the fact is we have both, delegates agreed. They faced the difficult problem of deciding upon the best mix of public policies and private enterprise for running the economy, and ultimately the answer was elusive. Moderator David MacKinnon described government's role as a strong supporting actor, rather than as the main player. Jon Grant, president of the Peterborough-based Quaker Oats Co. of Canada said: "The key is the proper balance. We live in a mixed economy and must recognize that this is what Canadians want."

After two days of discussion there were as many theories as delegates, each offering an opinion about where government's role as economic facilitator should stop. The thread wound its way through each seminar topic from high technology and innovation to the role of universities in research and development. The free market position was, predictably, that the least amount of interference the better, and that protectionist legislation produces uncompetitive industries and does more damage than good. Government should avoid an industrial strategy because it locks the economy onto a fixed and inflexible course. It should also avoid expensive inducements to lure industry to parts of the country where government rather than common sense dictates industry should go. The essence of the argument: the health and wealth of the nation lies in free enterprise.

Market-driven forces are the most effective way to get industrial

development," said economist Paul Kovacs of the Canadian Manufacturers' Association. "Government has a limited role to play. If there is a direction we should be going, it's to allow market driven forces to lead economic development."

He was particularly cool to the idea of a national industrial strategy: "Flexibility is the key. We have to be able to react to changes that take place over a short period. Industrial strategy tends to lock you into a course of action and I think one of the lessons we learned over the past couple of years is that if you're locked into a particular direction it leads to severe problems."

On the other side, there was support for a mixed bag of incentives and tax breaks, selective use of monetary and fiscal policies to direct growth and for a comprehensive industrial strategy. McMaster University economist Dr. A.A. Kubursi objected to the 'ad hockery' of current industrial policy but argued that the CMA alternative of nothing at all was as bad. He maintained that flexibility is not inconsistent with industrial policy and that a coherent policy in which every component and sector of society contributes and it can be flexible and adjustable. Dr. Kubursi admitted that Canada has limited choices and that decentralized government and regional and ethnic diversity makes systematic government interference difficult. But, he said, it was far better than "a passive acceptance of the wisdom of the market."

A second McMaster economist, David Winch, favoured a limited symbiosis. "If we believe that businessmen guided by market forces generally make better decisions than politicians and bureaucrats, then let the government refrain from interfering, free the market to do its job, and let the politicians and bureaucrats concentrate on playing their own proper and vital role," he said.

That role included providing the necessary public goods and services as well as a safe environment in which private enterprise can prosper. There was also a role for government in smoothing out the booms and busts of the business cycle

and redistributing income through its social welfare policies. He said the federal government can become both the servant and saviour of private enterprise in Canada, if it interferes as little as possible in the marketplace. Government as a servant provides the necessary public goods and services and the rules that provide a safe environment in which private enterprise can prosper. As a saviour, government corrects the failures of the free market, stabilizes the booms and busts of the business cycle, and redistributes income through its social policies.

"Equity is government's business," he said. "The role of the free market is efficiency." But if the links between public and private sectors become a muddle rather than a mix, the only outcome is frustration and discontent. The marketplace is driven by the motive of self-interest," Dr. Winch said. It serves the public interest only indirectly, through the outcome of market forces. When government practices tactical policy, it tries to be master of the market and the market system functions poorly in a servile role. Government has both structural and tactical policy tools at its disposal with which to influence the economy. He believed the structural tools are by far the most effective because they create clear terms of reference rather than imposing arbitrary guidelines.

"Only government can provide a system of lasting order, a set of rules that constrain the pursuit of self-interest," he said. "While those rules may well be more extensive and more detailed than laissez-faire would condone, they must be expressed as a statement of what individuals may or may not do in their pursuit of self-interest." Tactical strategies imply that government is the judge of public interest. If private enterprise does not behave according to the government perception of that interest "it becomes legitimate for government to manipulate them by use of any carrot and stick that will prove effective."

Mr. Grant said government has a limited role as catalyst and it is to provide a positive economic environment and the wide social safety net Canadians

have come to expect. "These services should not be allowed to erode," he said. "This is particularly true for the young unemployed who lack the education to enter our sophisticated work force."

Mr. Grant said the private sector produces wealth while government distributes it, but neither can assume the role of the other. Government does have a necessary role as a catalyst, but increased expenditures in the public sector, however attractive as they may be, must be paid for in some way. If the creation of wealth is hampered by public policies, then government will be forced to borrow more and more. It is not in any of our interests to encourage more deficit. Governments that compete with the private sector for borrowing fuel inflation that can eventually bankrupt the system. " I would be much more impressed if more joint ventures went ahead," he commented.

In a workshop which examined how much government stimulates, and in what areas, David Barrows, a senior official in the provincial industry ministry, said Ontario's view is that long-term growth can only come from private enterprise. He agreed with Mr. Grant that government cannot sustain growth and development and said there is a movement within government away from direct intervention and toward selective stimulation of the private sector. He also agreed that government has an educational role in training and retraining, and in this area it should try to induce industry to participate, particularly through incentive programs.

Mr. Barrows said Ontario has set this policy in motion through a variety of programs including:

- The Board of Industrial Leadership and Development(BILD) which has sponsored six high technology centres throughout the province to increase the transfer of high technology to industry;

- The IDEA Corp., a venture capital fund set up to help bring new

ideas to the marketplace;

- The Ontario Development Corp. (ODC) which provides loans to businesses wishing to expand and;

- An export consulting service which helps Ontario firms find overseas markets.

Yet, he warned that programs like that are not a substitute for private sector initiatives, noting that the provincial government strongly believes economic growth in the long term can only come about through a viable private sector and it is the role of government to support the private sector.

Earlier in the day, during a discussion of tax incentives and their effect on industry, both Hamilton Harbour Commission chairman John Agro and Hamilton-Wentworth Regional Chairman Anne Jones avoided the issue of whether incentives have a positive or negative effect. Mrs. Jones said local government should provide a framework, showing itself to be strong, stable, and consistent. If incentives brought development to the area, then it was local governments' job to cut red tape and make it easy for firms to get at the money.

The city should help itself and not depend on government for economic development, John Agro said, and both levels of government have given us catalysts and it's now up to us to use them." Mr.Agro quoted a Spectator article which noted: "Hamilton has suffered to some degree by the lack of coordinated industrial strategy with co-operation between industry and government." The article also quoted a regional official as saying there are many positive attributes of this area and the only thing that keeps business away is the squabbling and defeatism some people spread. He asserted that, "we have to start thinking as one community".

The role of Canada's universities within the private-public sector debate was described as essentially man-in-the-middle. The institutions are funded by government yet in many cases have also set up private companies to sell their ideas

and market the results of their research and development. In some areas, Canadian universities are leaders in their field. In one workshop it was suggested that this leadership may open the doors for new opportunities by selling a blend of knowledge and goods and may be the key that unlocks future overseas markets.

Bill Filer, president of the Hamilton Engineering Institute, said the excellence of Canadian university training in his field makes exporting knowledge as viable as exporting pieces of plant and equipment. He pointed out that Canada has a broad technical base and a number of developing countries will be making a quantum leap from low technology to high technology, representing a major shift in market potential.

He cited, as an example, a recent visit to Canada by a delegation of Chinese engineers, quoting them as saying that in many of their factories they have numerically controlled equipment for certain products, but others are still hand-made. The fit between those two is very bad and as a result, productivity is low. On the other hand, China is faced with the problem of employing multi-millions of people. Six million students come onto the job market every year in China. It will not be enough for us to sell industrial products to them, Mr. Filer said, because they will have to employ those people. So it will have to be a blend of selling knowledge and manufacturing rights to countries like this. These opportunities are there for the taking.

This workshop's broad topic was the interaction of universities and industry and how the pure research at institutions like McMaster can be applied to local companies with a benefit to both. There was general agreement that universities have a duty to explore new frontiers, but how that is to be achieved and in what mix was not clear.

Dr. Alan Frosst, McMaster Assistant Vice-President(Research Services), said McMaster is number one in Canada in per capita research grants. It spends 28

per cent of its budget on research, more than double the Canadian university average. Some 2,200 projects are underway with a funding of more than $33-million. Dr. Frosst said McMaster's response has been to spin off companies, perhaps best known among them the Canadian Institute of Metalworking. That company which is in the forefront of computer assisted design and manufacturing will soon move to the Ancaster Industrial Park. Another example is Nuclear Activation Services Ltd., a spinoff which is unique in North America. It can provide an analysis of core samples for the mining industry within a week. The process formerly took six to nine months.

Dr. Jack Kirkaldy, director of McMaster's Institute for Energy Studies said when the university creates a company it is sometimes the only way to market a new idea. "Industry does not always regard it as appropriate because it means more competition, but it is the one way. It's clear cut and simple and you don't have to sell the idea to some conservative manager," he said.

Dr. Kirkaldy said McMaster has spun off a number of companies over the years, often to the detriment of the institution because it has tended to take a valuable member of staff with it. Most have been successful, he said, but often before the companies could sell the product in Canada, it had first to be accepted in the U.S. or abroad first. This, of course, is a national problem, he said.

Ian MacDonald, president of York University and chairman of the IDEA Corporation, a provincial crown company, said the gap between universities and industry is like a reciprocal ignorance and the task is bridging the gap between the two solitudes. He described the primary role of the IDEA Corp. as in technological innovation and adaptation. The corporation tries to promote innovation by bringing together the research capacities of the public and private sector in joint ventures.

IDEA has established five high tech funds in the fields of

microelectronics, biotechnology, information systems, chemical technology and machine and manufacturing technology. The province has set aside $107-million for these funds during the next five years. Dr. MacDonald said "the essential purpose is not to perform basic research, but rather to advance the process of commercializing technology by putting ideas to work, acting as a catalyst for innovators and by encouraging our industries to spark growth and industrial progress. He also warned that as technological absorption increases there will be an obvious impact on employment.

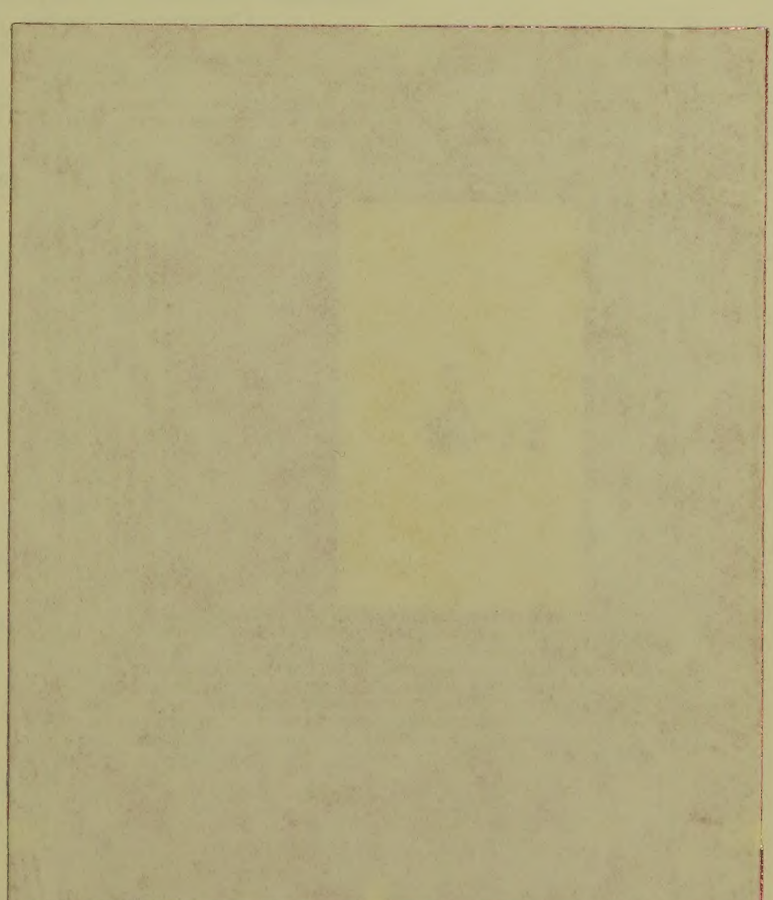
"There is no doubt that technology does change the profile of jobs," he said. "There's no denying it, so there are two consequences of a commitment to technology. The one is a recognition that a major effort is required to provide for a higher level of growth to create more jobs. The second is that the displacement of jobs requires a commitment to retraining, rehabilitation and readaptation. So, the worlds of technology and education are partners in progress."

High technology, its applications and the government's role in its promotion was a topic which commanded a great deal of attention. One senior federal official urged policy-makers to react with caution and restraint when they consider how it should be done. Pierre-Paul Proulx, an assistant deputy minister in the Department of Industry, Trade and Commerce, said government should not lead Canadian high-tech research, but focus on the applications of it to our primary and secondary industries.

He said the strategists should accept that we can make inroads in some areas, but are too late to catch up in others. They should also remember that the manufacturing sector stands as much to gain from the technology as the newly created industries. Ottawa's industrial strategies should focus on absorbing and diffusing the innovations, rather than pumping money into product development, he stated.

The workshop dealt with industrial strategies of the federal and provincial governments. The panelists touched a number of issues across a broad and sometimes conflicting spectrum. High-tech and its effects on us was one of them. Bryan Davies, an assistant deputy minister in the provincial treasury ministry, agreed there is a danger in putting too much emphasis on high-tech. "We shouldn't hold it out as a panacea, he said. "It is not going to come in and replace the steel industry."

CMA economist Paul Kovacs, said there is little doubt that new technologies will be important, but government efforts to put high-tech centres into every community across the province are pointless. "Traditional industries are still going to account for 90 to 95 per cent of the employment 10, 20, even 30 years from now," he said. "Perhaps the greatest importance of the new technology is the things it can do for the traditional industries. They are the major consumers of the new technology. It's important for governments to recognize that all industries are becoming information-based in their own way. The steel industry, for example, is using this technology to make their operations more efficient and productive."



Coping with the Social Impact of Economic Change

Session IVa:

How Adequate are the Region's Social Services

Labour Force dislocations, problems of youth unemployment, premature retirement, the family and other stresses on the individual that generally accompany major economic changes and similar social impacts will inevitably place great pressure on the region's social service structure when declining regional tax revenues could limit the local funding available. This session examined the potential need for social services, the adequacy of the present structure, and the respective roles that might be played by government and voluntary agencies.

Moderator: J. G. Doherty,
Publisher,
Owen Sound Sun-Times

- W. M. Carson, Commissioner, Social Services, Regional Municipality of Hamilton-Wentworth
- Peter Douglas, National Representative, Canadian Union of Public Employees
- Linda Graff, Director, Volunteer Bureau
- Professor Jean M. Jones, School of Social Work, McMaster University

Session IVb:

Special Needs: Social Services for Youth and Elderly

Economic Reconstruction is likely to be most seriously felt by the older worker who has limited or no opportunities for retraining or career shifts when his primary job disappears and by youth with relatively low levels of education and technical training. This discussion focused on the particular needs of aging and youthful workers, and their adaptation to economic reconstruction.

Moderator: Dr. J. E. MacIntyre,
Director, School of Social Work,
McMaster University

- A. R. Busseri, Manager, Canada Employment Centre
- Jon Buttrum, Executive Director, Citizens' Action Group
- Dr. J. Ronald D. Bayne, Medical Director, St. Peter's Centre and Professor of Medicine, McMaster University

Session IVc:

Special Needs: Social Services for the Disadvantaged

The discussion paper examined the implications of the changing economic environment for the provision of social services to disadvantaged groups such as the mentally and physically disabled.

Moderator: Bishop J. C. Bothwell,
Anglican Diocese of Niagara

- June Kertyzia, Executive Director, Path Employment Services
- Dr. J. I. Frid, Associate Clinical Professor, Department of Medicine, McMaster University, Dean of Health Sciences, Mohawk College
- D. S. Wallace, Director, Amity Rehabilitation Centre
- Ross Robinson, Associate Creative Director, R. T. Kelley

Session IVd:

Neighbourhood Renewal—A Particular Opportunity

As the regional economy changes, land previously given over to industrial use may well become free for other purposes providing opportunities for both urban renewal and the economic activity renewal projects can generate. Refurbishing aging housing stock and neighbourhoods can also be a productive and beneficial undertaking. This discussion looked at the economic and social potential of neighbourhood renewal in the region and identified the issues it raises.

Moderator: Alderman Bill McCulloch,
Chairman, Hamilton Planning and
Development Committee

- Irving Zucker, President, Revest Holdings Limited
- Alec Murray, Alec Murray Real Estate
- Kevin Garland, Partner, A. J. Diamond Assoc.
- Robert Hale, Manager, Program Improvement, Canada Mortgage and Housing Corp.

SUMMARY OF THEME IV DISCUSSION SESSIONS

Mike Pettapiece
Reporter, The Spectator

Alvin Toffler called it future shock - the acceleration of change, spilling with it stress and disorientation on both personal and societal levels. And he and other futurists predicted massive social upheaval unless society learned to adapt to that stress and to balance the rate of change and human response.

For Hamilton's social services community - a network of human care agencies is an industrial city torn by evolution - future shock is today's trauma. The recent recession sorely tested the social services fabric as branch plants closed or factories rationalized products while laying off employees, house prices soared as workers lost their homes.

All these factors and others dumped a flood of new problems onto the existing net in the Hamilton area. The problems cried out for closer community co-operation when shrinking budgets forced agencies to look inward for life-saving adaptations and efficiencies. That was the setting at the Economic Futures Conference. In the end, the conference was long on analysis but short on potential solutions. There seemed little doubt that society needed a new social contract to care for the casualties of change, and that community-wide reassessment and planning would be needed to cope with future shock. Many speakers pointed out that the decentralization of government programs was being compounded by the lean and mean fiscal stance adopted by senior government levels. That meant the human fallout was increasing annually.

Unfortunately for municipalities, the wrinkle in the decentralization -

the transfer of responsibilities from the Province to cities and towns - was that it did not come with the accompanying taxing authority. An interesting contradiction surfaced in conference seminars. Business delegates said Big Government had to pull out of the economy. But many social services delegates felt that the withdrawal process had already gone too far.

The pullback came accompanied with a clear warning by one keynote speaker. If the lean and mean posture continued, said Robert Hebdon, of the Ontario Public Service Employees Union, society will face bitter reaction from an increasingly hostile group of unemployed and underprivileged.

"Our social services system is under attack," said Mr. Hebdon, the union's senior research officer. "If we allow the attack to succeed as a society, we will not be able to cope with the rapid technological changes which are taking place in our economy. And if we are unable to cope, I don't think I have to paint you a picture of the dire consequences we can expect."

How to cope? Delegates tossed up several ideas, the most popular being the creation of a vaguely-defined but constantly-embraced guaranteed annual income. Others suggested pension improvements, radical retooling of social service agencies and financial pumping of the volunteer sector. The overall consensus was that all of society, including labour, business and government, had to develop joint strategies to approach the problems. And that would mean a willingness to spend money where it was warranted.

A conference organizer, Mike Pennock, now former director of the Hamilton and District Social Planning and Research Council, summed up the needed costly changes this way: "All of this will, of course, cost more money. And this is the cost that must be borne by those of us who still have jobs. It is at this point - and I think this is crucial - that the problem of unemployment ceases to be an economic or social problem but becomes a moral problem. The fact that we do not

have enough jobs to go around may be an economic issue. But the choice of how we as a society should respond to that is a question of morality."

The brutally swift upheaval, taking with it jobs, factories, and human dreams, has not been matched by the balanced human responses Toffler wrote about, the innovations that allowed the victims of such upheaval to cope and understand what was happening. In Hamilton-Wentworth, the human stories were told last year in ever-growing numbers at federal, provincial and local social service agencies. The unemployment rate soared beyond 40,000 persons, welfare cases climbed perilously close to 10,000. Youth and the elderly suffered, particularly workers with years of seniority whose skills were no longer needed, as did the disadvantaged, the disabled, the mentally and physically-handicapped. It all left several participants with the feeling that time was running out.

Mac Carson, commissioner of the region's social services department, said he believed "we were at a crucial point in the history of social services in this area." Dr. Michael Dear, of McMaster University's geography department, put it this way when referring to the future for the disadvantaged -the mentally ill and retarded, the disabled, ex-convicts and others: "It seems to me that we are indeed poised at the edge of a crucial historical cusp," he said in his work paper. "The choice is to retreat back to institutional care or to renew our commitment to community care."

Social Services in the western end of Lake Ontario hadn't just arrived at this juncture overnight, said Mr. Pennock. Unfortunately, he said, post-Second World War prosperity with its rising incomes and middle-class comfort had bred an arrogance in social institutions. They believed they could handle the problems tossed at them, that they could be flexible and organized enough to cope with added demands. Income-maintenance systems set up since the war were established on emergency, short-term bases since it was not expected people would be off work for

extensive periods. Long-term programs were for special groups such as the disabled or single mothers on family benefits.

"And the expectations have just gone away beyond the reality of what can actually be delivered," said Mr. Pennock. "Part of that soul-searching we all have to go through in our institutions now is what is the reasonable expectation? The big effect that the present situation is having on all our institutions is making us aware of our flaws because the flaws are easily masked during a time of prosperity."

While it was positive that the community do some soul-searching to see whether its network was adequate and co-ordinated, there seemed to be general agreement that this self-examination had to focus on needs to the end of the decade and beyond. And that scrutiny could have some brutally harsh realities for social agencies which are doing the futuristic look, said Mr. Carson.

He said present and future demands made it imperative for the community to look at potential needs through what he called a methodology of an optimum model for service. Such a study should define a realistic lifestyle of expectations whose criteria would be established by a group represented by all levels of community. Once designed, the optimum level model should be enshrined in something authoritative such as the Official Plan, he said.

Services not called for, in light of the model, would have to be sacrificed - "the hard part", he told conference delegates in setting the scene for the future. That kind of planning required "a courageous decision", he said, something like the old lifeboat game in which someone goes into the drink so that others may survive. If not, the remaining agencies would be nickeled and dimed to death in the future.

"If this proposed method of hard planning is not followed, then I have a great fear about the levels of service in the future," he said. "If we continue the present ad hoc method of trying to meet every need and be nice to everybody, then a

point will be reached where the increasing costs will result in Draconian measures being forced on government. We only have to look south of the border to see what has happened in the United States, and refer back to Proposition 13 and all the things that flowed from that."

However, he was generally pessimistic about the possibility of any realistic planning until it was too late. Susan Goodman, director of the Halton Social Planning Council, agreed the community had to have the courage to alter priorities and the wisdom to set optimum levels of service. While she could not speculate on whether that would happen, she believed Hamilton-Wentworth's social services infrastructure was efficient and susceptible to change.

Already, the future shock effects of the recent recession were hitting social service agencies. The short-term fallout was obvious: increased caseloads and user fees (some levied for the first time); growing impact on inpatient mental health services; high demand for credit counselling. By 1985, said Mr. Pennock in his research paper, the highest demand would be placed on such services. There would also be a growing impact on outpatient and counselling services for discharged inpatients.

It was the human pressures, and not the institutional stresses, on which at least three workshops at the conference focussed. The message was more like a plea: Don't forget the perennial social victims - the disabled, young and elderly, former psychiatric patients and others. They were just starting to make some gains and now stood to fall behind again as public budgets became squeezed. The private sector was not replacing that vacuum.

"The gap - and I use that word with great reluctance - between the public sector and the corporate sector is not very reassuring for the future of the issue we are discussing today," said Ross Robinson, associate creative director of R.T. Kelley advertising agency and sightless for the last few years.

Anger and anxiety about the future in some cases burst palpably into bitter statements. June Kurtyzia, of PATH employment services, told the same workshop Mr. Robinson attended that too many disabled eked out a survival living on social assistance, without ever having a chance to earn a living. In a brutal reference to the poverty of India, she said Canada's social assistance plans had put the disabled into the position of begging for access to these plans while keeping them prisoners of their lifestyles. This, of course, fostered dependency and not ambition for self-reliance. And it added to society's costs in the long run.

The system creates built-in snags, said Miss Kurtyzia. For example, a disabled person obtaining a job, no matter how poorly-paid, stood to lose his Canada Pension benefits and access to free dental care, she said. Ironically, she and other spokesmen for the disabled pointed out, the move to robotics and new technology could help handicapped persons if they are given a chance. "These changing times of high technology, robotics, computers etc. are the best thing that could ever have happened to a physically-disabled person," said Miss Kurtyzia. "They have been used to, and understand, the use of tools. They have been using electric wheelchairs, computerized information services and don't have to adjust to this new world."

What was required was public education of society and of the social victims, she said. Several times, different speakers made reference to the need for educators to better prepare all citizens for the job world.

"We seem to educate for so many areas but we do not educate for living," said Borys Chemrys, chairman of community studies at Mohawk College. "Why not courses on coping mechanisms, on problem-solving, decision-making, family living, human relations?"

Life skills education was paramount for the young and elderly, said some speakers. One delegate, Jon Buttrum, of Citizen Action Group (CAG), described

problems his agency had had in trying to find jobs for youths who have difficulty spelling the name of the high schools they dropped out of 30 minutes earlier. If society and public educators didn't better prepare youths for the real world, he said, the country would be left with "a generation of employment zombies". And if labor and business did not co-operate in retraining employees, then those workers would be dumped on society, adding to the social burden and reducing the self-worth of the fallout victims.

He was especially critical of federal job creation programs, calling their results"pretty dismal". He did, however, applaud recent attempts to dovetail such programs with private sector initiatives. Lately, however, CAG was seeing more and more elderly workers laid off with specific skills related to their former industry and with few prospects for a new job.

"Now what am I going to do with this guy?" he openly asked a workshop, referring to one older white-collar worker laid off after a perfect record of job attendance - the type of client CAG had never seen before. Dr. Ron Bayne, medical director of St. Peter's Hospital, said the community had better get used to seeing more elderly on its streets as the population aged. The demands of the future meant that employees will hold many different jobs in a lifetime. He and Mr. Chemrys said the elderly may be constantly taking retraining or education updating courses until retirement. Some community colleges offered those courses now.

Medical advances promoted the aging of the population, said Dr. Bayne, and that increase placed greater demands on society and industry to come up with labor-saving, transportation and other devices to accommodate the elderly. It also meant that society could not afford to treat services for the elderly so meanly, he added.

However all this restructuring washed out in the end, the new era was going to place a large demand on volunteerism, on people who donated their time,

skills and compassion free of charge. Although there are no firm statistics, said Linda Graff, of the social planning and research council, figures from 1980 would seem to suggest an unpaid labour force equivalent to 220,000 persons working for a year.

Calls to the SPRC from citizens interested in helping out escalated last year, she said, and showed every indication of continually increasing. The most distressing fact about the volunteer effort has been that no government has recognized the potential. No government has talked about resource facilities dedicated to volunteerism and research on volunteerism, she said.

One of the more important areas touched on at the conference was the growing crunch in the provision of low-cost housing in several municipalities across Canada. Said Kevin Garland,of A.J. Diamond Associates in Toronto: "I think we shouldn't underestimate the incredible crisis we have in low-income housing for families all across this country. It really is a very serious problem."

Hamilton has always been involved in, and has demonstrated innovative approaches towards,the low-income housing field. For example, the city has had allocated to it $3.7 million in RRAP (residential rehabilitation assistance program) funds which had rehabilitated almost 900 units, said Alderman Bill McCulloch. In a seminar which he moderated, he pointed out that Hamilton has been a leader in community-based housing as well. The Hamilton East Kiwanis Club had housed more than 150 families by last fall, the seminar heard. That non-profit project, which has pleased existing neighbourhoods because it has improved run-down housing, was cited as one way the community could adapt to the pressing need for more low-cost habitation.

The non-profit corporation buys residential and commercial property in poor condition, renovates or converts it, and then rents out the units mainly to low-income families. The project uses conventional National Housing Act funding with

writedown mortgages by the Canada Mortgage and Housing Corporation. Rents average about $300 a month. The plan also has a buy-out proposal should the tenant decide to do so during the initial five years.

In his research paper on the issue of low-cost housing in inner-city neighbourhoods, Dr. J.J. Rice, of McMaster's School of Social Work, said similar project sponsors must learn to enter the private market - to buy homes on the lower-end of the market and not just abandoned homes. That would create a ripple affect with one needy family finding new accommodation in the renovated homes and the displaced families moving up to somewhat better dwellings.

Miss Garland, ofA.J. Diamond, found the paper "absolutely fascinating". While most government programs allocated 25 per cent or less of total units to the less fortunate, this project had as its aim most of the redeveloped units for low-income families. The biggest booster, not surprisingly, for the East Kiwanis plan was former mayor Jack MacDonald, who is connected as a project manager with the club and project. He said the non-profit corporation assumed properties one at a time so that there was no mix-and-match approach. The rehabilitated properties not only improved neighborhoods but led to increased municipal property taxes. In 17 months of reconstruction, he said, the East Kiwanis projects had created more than 110,000 man-hours of employment and used the services of 155 contractors.

Irving Zucker, president of Revest Holdings Ltd., lauded a new Ontario program which provides funds to allow owners to duplex their houses. That could lead to retired couples, who did not need the entire building to live in, converting their homes to duplexes. In this way, society could realize "a sort of surrogate-grandparent type of thing" in which a single parent might be able to use the assistance of the elderly owners.

Many ideas and suggestions are being presented at the closing plenary of the conference. Seen left to right are: Donald C. MacDonald, Former Leader, Ontario New Democratic Party; Dr. Peter George, Committee Chairman; Honourable Robert Stanbury, Firestone of Canada; Graham Wilson, Vice President, Dofasco Inc.; Mike Pennock, former Executive Director, Social Planning and Research Council, Hamilton & District; the Honourable Gordon Dean, Minister without Portfolio, the Province of Ontario and Dr. Les King, Vice President, Academic, McMaster University.

CLOSING PLENARY

REPORT AND RECOMMENDATIONS THEME I

A Manufacturing Base in Transition

Graham Wilson
Vice President, Dofasco Inc.

The theme I was involved in was the manufacturing base in transition. In Mr. Shepherd's presentation he discussed the revolutionary improvements in management techniques; in the capacity and readiness of business to ship production anywhere in the world to achieve cost advantages and an improvement in competitive position. He pointed out the tremendous impetus that is building in terms of new product innovation and the key role of strategic planning in the future. In his view three lines of attack are needed to be developed to create a leaner, more dynamic manufacturing sector: the first, specialized participation in world product - the example used was the world car; the second, the special products niche; the third was an improved rate of development of new enterprises.

The next session in the theme was centred around the prospects for heavy industry and consisted of presentations and comments from Westinghouse, Harvester and Stelco. Also in attendance, and presenting their views were a member of the investment community and a member of the academic community. The session was characterized by a variety of views, sometimes in conflict. Initially, it started out talking about whether the problems we're experiencing at the present time are largely cyclical, or structural in nature, and as we all know in boom times, the structural problems that tend to be hidden. I think we've all learned something about a new way to operate in the last year or two. However, regardless of the outcome of that debate, one couldn't help but be impressed with the actions that have already been taken to create a new and stronger

manufacturing sector in this community. My comments will largely relate to the larger segment of the business community, as, frankly, the smaller segment didn't come in for a lot of discussion in this session and perhaps that is something we should consider for the future.

These actions were closely allied to many of the suggestions that Mr. Shepherd made. We talked about world class products and competitive prices. Mr. Priestner of Westinghouse, I thought, made an excellent presentation and I lifted some quotes from his address - I didn't think there was any way of putting them any better.

The first thing we must develop is a common perception of the problem, to come to an understanding without an economic catastrophe that international competitiveness in manufacturing and resource industries has to be a national and regional priority. The second major task is to face up to the reality that throughout the eighties, competitive advantage, new product development, new markets, productivity and profitability will be tied directly to technology. Technology advances will revolutionize not only high technology industries, but mature ones as well. They will have an impact on the processes of design, production, planning, manufacturing, testing, selling, installing and servicing, as much as they will the products themselves. The needs will vary from product to product, from industry to industry, and our attitude must be one of flexibility and attention to detail if we are going to solve them.

The industrial winners in this era of economic imbalance and escalating competition will be those firms that seize and exploit technology as a corporate strategic weapon - an asset that can be managed in support of business and corporate strategy. We mustn't forget that it is vital that we not just talk about the new businesses and new industries. Retrofitting factories and offices so they can compete in the new world is just as important. Let's not overlook the old winners.

What we need are more training, more flexibility, more automation - robotics, fewer assembly lines, a shift from manual work to brain work, a shift from labour intensive to capital intensive operations and more flexible machining centres, closer co-operation and planning. I think this is rather vital among labour, government and business leaders. The prime mover in training and retraining will fall to management, but management cannot do it alone. The worker - the labour representatives - must be willing to co-operate. The educators have the skills and facilities to be of great help in the process as well. And, the government must provide the right environment, and the right support. Management must devote the time and resources to do the job...and certainly the job is worth doing.

The view was also expressed that progress is being made in creating the infrastructure that the region needs to pull it together. While all of these things are not together, at least progress is being made. They have been talked about for many years, but finally action has been taken in many areas: The improved transportation network, the convention, recreational and hospitality facilities that are so important in making an attractive community, where people want to work and to play... the quality of life syndrome...the airport, the serviced industrial land, the educational and training facilities so complementary to success. An improved positive community and political attitude, and co-operation are necessary to attract new companies and people so that they'll want to come and live and work here.

Now, consider examples of specific actions that are being taken in this area in terms of the Westinghouse experience - in new product mandating Westinghouse is responsible for the designs, sales and after-sales service of certain products on a world-wide basis. That is already in hand and it is moving. Harvester has its problems as we all know, but Harvester as well are looking at concentration and rationalization of their facilities and are product-mandating in

the North American sense.

In terms of steel, new special steel products are being produced. Some of them are already developed. They are more sophisticated and they enable the steel customers to be able to do their job better, to be more competitive in domestic and in world environments. New capital facilities in steel that incorporate, and have incorporated for many years, world state-of-the-art technology are nothing new. New investment opportunities and growth will undoubtedly be slower in the few years coming, but new investment opportunities will concentrate even more on state-of-the-art technology: innovation, productivity, quality. The effort will be to produce an environment of competitive excellence. We've done the job well... we're going to do it better in the future.

On that topic, I would like to make a bit of an aside, an editorialization. In some of the newspaper coverage regarding the steel segment of the session yesterday, some of you may have been left the impression that the expansion and growth in the community will be outside the community in terms of steel. I can't speak for the industry, I can't speak for Stelco, but I can certainly speak for Dofasco. We've grown, we've prospered here, we intend to grow here and we'll be here for many years to come. An example of that is our recent announcement two weeks ago of a $75,000,000 expansion. The other area where new things, exciting things, are happening in the community is the area of Firestone. I understand their modernization program is underway with government assistance and the large amount of money spent there will be an effort to North American product mandate.

The next session dealt with the high-tech option. I was interested in that session because, like everything else I suppose, it is a mystery to me as it is to all of us. It was a good session and interesting. However, I think they really only touched on the topics. I felt it could have gone on another three hours, quite

usefully. I think one of the panelists opened up his remarks with a quote from Woody Allen which I thought was rather interesting. Woody Allen's comment was that, "Mankind faces a crossroad - one path leads to despair and utter hopelessness, the other leads to total destruction. Let us pray that we have the wisdom to choose correctly." I thought all of you should share in that Woody Allen comment.

There really didn't seem to be any question in the panelists' minds that there is no feasible alternative to high tech if we are going to reach our goals. The change will come. It will come in jobs. We have to handle those changes with sensitivity, with care. The retraining that is going to be necessary will include job content and certainly retraining in terms of life styles. Like anything else when you're dealing with people, we have to deal with it sensibly and sensitively and proceed with their knowledge, and work with them so that they can really understand what is happening.

The application of high-tech, instead of resulting in massive layoffs, which some people believe will happen, can result in many new, more interesting jobs. That certainly will only take place if we keep pace with and develop much of the technology ourselves. I realize that is a controversial statement. Undoubtedly, that is one of the options and one of the problems that should be addressed in the future. The application of high technology must go hand in hand with an examination of sectors and specific products, indentifying those that are going to be the winners, whether it's domestically, or on a world scale basis and as you will see that goes back to some of Mr. Shepherd's observations.

In terms of the role of government, the question is how do we get this large body of knowledge down to the manufacturers' level. If you're dealing with Westinghouse, or you're dealing with Dofasco, or Stelco, or some of the other large ones, they have the resources, as we all know, probably to find out what this technology is, to acquire it, and to apply it. The question is how do we get the

diffusion of knowledge down to the manufacturers' level, the small and the medium size manufacturer. I think that is identified as a problem. I think the people see a role for the government in it, but I'm not sure that any of us really have the answers.

If I had a criticism to make of that particular session I would say that it really didn't deal enough with the implications of high-tech for the small manufacturer.

The next discussion centred around the service sector and prospects for tourism and small business. It really seemed to centre mostly on tourism and the economic base of the region and the tourism base is an opportunity that shouldn't be ignored. There is no question of that conclusion and there is no question that we need a better balance in this community in terms of small business and tourism. Many saw opportunities in this area, because of its geography, which is fitted for the future. The area should be designated as a tourist area by the governments. It would make it eligible for more grants and for better financing. That clearly was identified as a goal. Problems of the tourism industry were emphasized, in particular it is really not competitive vis a vis tourism south of the border, largely because of government taxation levels and gasoline and alcohol, in many cases.

Concerning attracting new capital and business at the most recent session that just concluded, the consensus seemed to be that attitude is the important thing. Non-financial considerations are the important things in terms of assistance to bring and attract new business and capital to the area. There are a number of factors that are critical to attracting this kind of thing; political stability, a sound economy, government attitude, consistency in government policy, attractive tax systems and so on.

In concluding, I would like to say that personally I found the experience of the conference very rewarding. I thought that we discussed many of the issues.

It was issue-identification in many cases, I'm not sure that it was problem-solving, but maybe that is the next step. I don't think anything will happen without a strong commitment on everyone's part to make it happen. The Spectator and McMaster are to be commended for putting this together. I hope that in any subsequent events that take place, people do not approach these problems with a rigid, inflexible attitude. I think that's really going to be the key to success in any area. Whether we come from the business community or political community or academic community or whatever, we really have to look at the problems, understand the other persons' point of view and be willing to adjust.

REPORT AND RECOMMENDATIONS THEME II

The Human Resources Dimension

Donald C. MacDonald
Former Leader, Ontario New Democratic Party

Donald MacGillivray who is National Economics Editor of Southam Press, pointed out at this session that the economy is the resource and it should be used to meet the needs of human beings; that people shouldn't be regarded as a resource like others are, but rather that their needs should be met by the economy. In other words, human beings should come first and this should be answered emphatically. Now, this immediately posed some pretty dramatic confrontations. We had on the panel Gerry Connors, of the Electrical Workers Union, who reminded us that 50 per cent of the electrical workers, today, are unemployed. In the Spectator there was an article by a Bell employee who pointed out that 20 people could, in the future, do the job that a thousand used to do. Therefore, there is not only the current unemployment problem but also the prospect of even greater unemployment.

Not surprisingly, there came the counter argument that in North America most companies, in the face of international competition, lower wage levels and other factors all across the world, are facing nothing less than survival; and if they are not facing survival, there's the bottom line, which is the return on investment.

I don't think we came to any solution of this. I suspect you never can come to a solution in a general discussion whether it be in the ivory towers of academe or whether it comes in a conference of this nature. It likely is necessary to establish that appropriate balance between economics and people, as Donald MacGillivray argued. That was the first unresolved but important point in the theme and it echoed.

For example, the question was put, "Should people control the introduction of all this new technology or should they become, as they are to such a significant extent, the victims of it?" One of the advantages of the new technology is that it makes it possible for manufacturers, for management and for capital to reduce the excessive costs of administration. However, 80 per cent to 90 per cent of the new jobs aren't in the manufacturing sector but in the service sector. In any of these service-sector jobs, fewer skills are required and there is lower pay. Women, who have been ghettoized up until now and who have received lower incomes, are really the shock troops in this battle in the introduction of technology.

There is a tendency, however, which we are warned is likely not to be altered, of capital flight. If an industry feels it can move to a different province, to a different jurisdiction, to a different continent, it will so do. In other words, are you going to have a people-oriented introduction or an economic orientation of this technology? It was argued that all these are social problems and not really technical problems. This was another approach to the whole question of whether people or economics that should be given the top priority.

A second theme emerged very strongly throughout on the whole question of education and training. Everyone recognizes, and it was reiterated many times in many ways, that education is a life-long experience. It must be. It is not just something that is crammed into childhood and adolescence. But there is a real conflict as to what the purpose of education may be. Is it to develop the whole being, the whole person, so that they can have the skills to accommodate themselves through this fast-changing world, or is it an economic one, training to get into the work force? It is an unresolved conflict that goes on and re-emerges in various forms.

Now, since individuals are likely going to have to train and retrain two or three times for a career throughout their lifetime, should the objective be to

provide a general education that will provide them with the skills, the capacity to think, the flexibility to be able to adapt to the situation, or should it be training for a specific job? Some concerns were expressed about the proposed restructuring of secondary education, of the curriculum, of the adding higher standards, of further options for which there had to be qualifications. If these happen, what is likely to be the impact? The group was reminded, for example, that in the year 1981 only 60 per cent of the entrants to grade 9 graduated from grade 12. If the drop-out rate is that high, given the standards that we've had, what will be the future level of drop-outs?

William Watson, the personnel director from Dofasco said, "We've operated in the past on the basis of three R's which have really become the six R's, the extra three being remedial reading, remedial arithmetic, and remedial writing. In keeping with Alvin Toffler's recent reminders in his new book, what we should be moving to is the three C's: namely, Communication, the capacity to communicate in a computerized age; Co-operation, the necessity to be able to co-ordinate all of these ingredients whether it be in industry, local government; and finally, Career awareness.

I was interested in the limited extent to which there emerged in this discussion something which I find of growing concern, and speaking as a long-time critic of the government, I won't surprise you by this. That is, we were told by Premier Davis when he was Education Minister that education is an investment, not an expense; that education is the key to the development of human skills and the development of those human skills is really the key to economic health and economic growth. I asked myself, what is going to happen in a day when we have a restraint programme in education, a restraint programme which is resulting in growing concern about the lack of accessibility at the university level and, indeed, a lowering of standards and inadequacy of replacement of equipment and so on and so

on all throughout the educational system?

If it was important back in the 1960's that human skills should be developed when presumably we were still in the industrial age, isn't it even more important that we should have the development of those human skills in the post-industrial age with its micro-technology impact? How can it be done within the context of a restraint programme? I find it fascinating that Ian MacDonald, who used to be Deputy Provincial Treasurer and now is President of York University, constantly reminds audiences that that the grants per capita to universities in Ontario are the lowest or second lowest of any province across this country. You can hardly read a story about university people speaking of their problems without some reference - with increased passion - on the impact of this restraint programme.

I come to the final theme that emerged. There was a painful schizophrenia in everyone of the groups in our four sessions between optimism and pessimism, optimists and pessimists. I think everyone would like to have been an optimist and there was a tendency to go off on that tangent. Then, of course, they were yanked back into the realities of the world by reminders such as that 50 per cent of the people that I represent are unemployed or that the 1,000 people who used to work are going to find their work done by 20 people in the future.

I quote from Professor Jain's paper: "The perceived problems of massive unemployment resulting from micro-electronic technology haunt the pessimists. A recent study for the federal government indicates that between one million and two million jobs in Canada will disappear by 1981 because of technological and structural changes in the economy. A study predicts that between one-quarter and one-half of all jobs in manufacturing and one-quarter of all jobs in business and financial services will be eliminated by the end of the decade."

Earlier in the same paper, it was indicated that the task force, of which

Professor Jain was a member, had set as a basis the assumption that micro-electronic technology has the potential to create jobs, to increase productivity, to improve economic growth, and to enrich personal development. Well, there is an awful gap to be bridged there between all the million and a half unemployed and the others who are going to become unemployed because of the continuing impact and the alleged potential of micro-technology.

So you have this real schizophrenia between the optimists and the pessimists. Some, of course, will never be persuaded to become an optimist. The comment once was made that the difference between an optimist and a pessimist is the optimist says that the glass is half full and the pessimist says that it is half empty but they both are talking about the same thing. It is a matter of perception and attitude. But, for many who are the victims of the introduction of technology the glass isn't half full, it is empty and appears to be continuing to be empty.

One of the conference people too commented that education and industry in industrial communities have lived as two solitudes. The thing that is most encouraging is that in this community the educational world and the business world are not living as two solitudes. They haven't in many ways. This conference is a further indication of the building of the linkages that will make it possible to have that common attack on an admittedly common objective.

REPORT AND RECOMMENDATIONS THEME III

The Public Sector Interface

Hon. Robert Stanbury
Chairman, Firestone Canada Inc.

The "branch plant" syndrome characteristic of much of Canada's industry was criticized at the session on "The Knowledge Industry and Industrial Development", particularly from the standpoint of allowing private sector research to take place in headquarter operations elsewhere. Based on the paper produced by Dr. Alan Frosst, Assistant Vice President, Research Services & President C.I.M., an effective analysis was made during this session of the effect of Canadian universities on industry and business in this country, mainly through outreach programs and research.

An insight into the efforts of the Province of Ontario in adapting research to commercial enterprise was gained by the participants through an explanation of the Ontario Innovative Development for Employment Advancement (IDEA) Corporation, established by the Ontario government as a crown corporation. I felt that other issues such as career and manpower forecasting, adult retraining and replacement in the work force and other areas of manpower development programs were not addressed, "and therefore half of the purpose of such a discussion was missed".

In the section on "Industrial Policy Strategies of the Federal and Ontario Governments", two assistant deputy ministers, representing the federal and the provincial governments, were present to explain industrial policies. Regional disparities were seen by both Bryan Davies, Assistant Deputy Minister, Office of Economic Policy, Ministry of Treasury and Economics, Ontario, and Pierre-Paul

Proulx, Assistant Deputy Minister, Ministry of Industry, Trade and Commerce, as a major problem in the development of these policies. Mr. Davies explained how the Ontario government is attempting to provide a good environment for industrial development in which the private sector would be given more incentive to invest. The two representatives of governments both felt that industry might place less emphasis upon high technology at the present time due to the impact upon the work force.

This view, however, was challenged by Paul Kovacs, speaking on behalf of the Canadian Manufacturers Association. High technological advances in industry are essential for industrial research and development, he believed. He criticized government intervention in the areas of such development and pointed up his criticism with the slogan, "If the private sector can do it, let it."

Other policies besides those stated in the position paper were cited by the discussants as also playing an important part in the mosaic of government support for industry. These included regulatory programs, tax environment policies and procurement policies. A common theme in the discussion of the private sector, was the direction of government policies of "protectiveness" versus "active industrial development". Criticism of government policies in general fell upon Canada's lack of international competitiveness of the kind that other countries enjoy as a result of their industrial policies.

Many suggestions came forth in the section on "The Effect of Tax Policies in Stimulating New Business Activity" on the best ways that municipalities might assist in the development of business and industry. Initially, there was a trend toward the suggestion that only senior levels of government could have much influence in the area of taxation policy and regulation, or in programs of incentive to stimulate business/industry/job creation. However, Burlington Mayor Roland Bird turned the thought toward a great deal of activity at the local level which

could be done to create a more positive environment conducive to business growth.

It was generally agreed that the key to community development lies with proper planning in both the short and the long range; stability of the governing body; a reasonable tax rate with the municipality operating on a businesslike basis which included controlling expenditures to keep within the bounds of resources; the creation of a positive attitude throughout the community through this proper form of management; and a conscious effort to avoid the development of an attitude of competition with neighbours.

Jordan Livingston, representing small business, pointed out that this area has some difficulty in taking advantage of the various incentive programs being offered by provincial or federal governments because of "red tape" and competition for funds, as well as the "general hassle" one must go through to be successful in obtaining such assistance and the need to work through reporting forms and similar paperwork. Mr. Livingston also questioned the value of incentive programs compared with allowing business to retain more of its earnings rather than having them taken away for redistribution by governments.

Sandy Skinner, speaking from the finance and accounting side, dwelt on some of the problems generated by the constant requests of governments for incentives, rebates and related assistance. These, he said, only serve to add to the deficits which, in turn, tend to add to inflation and other problems.

Summing up the work of this session, I list a number of points that were made by the various participants on how municipalities may best assist business and industry:

--To have a close working relationship between municipal government and business;

--To operate on a businesslike basis;

--To control spending but recognize priorities which have to be met,

such as transportation corridors, serviced land, cultural facilities etc.;

--To provide assistance wherever possible through those things which local governments can control, such as license fees, lot levies, hookup charges to services and utility rates;

--To work together with, rather than against, neighbouring communities on occasion;

--To remember that there is really no free lunch and someone must pay;

--To keep a positive attitude and attempt to reflect this in dealing not only with prospective business or industry but with those existing;

--To communicate, as governments at all levels must do, with each other and with business, labour and the community at large.

My own personal assessment of the session was that there was not really much talk on the subject of tax policies, except for an observation that the local government does not have control over the major portion of taxation.

The thrust of the session on "Government as a Catalyst for Economic Development" was mainly that government can play a supporting role in attracting and creating economic development, but that its role should be not only that of leader but also supporter of individual and community effort. There seemed to be agreement that governments can assist in putting into place programs, incentives, attitudes and atmosphere that will create a climate conducive to economic expansion. Still, it was held that the private sector must be looked to for the major activity if the expectations of Canadians are to be met in the areas of wealth generation and additional job opportunities.

All panelists seemed to believe that governments should be catalysts for economic development, as suggested in the title of the session, rather than occupy

any activist or interventionist role which would simply involve tinkering to the detriment of such development.

In terms of my own perception of the public sector interface, I believe that too often it is a confrontation kind of interface, whether the public sector is interfacing with business or with labour. I think the interface among all elements in the community, including the public sector, must be a more symbiotic or constructive one if we are to achieve the objectives for which we gathered together at the conference. I think that it is significant that an educational institution and an institution of the information media have joined to sponsor such a conference, because they are crucial elements in the interface between the community and governments.

I also want to emphasize that the Hamilton and District Chamber of Commerce is attempting to follow a similar constructive, cooperative approach to the future of the area. We regard the economic future of this area as dependent not only on the narrow advantage of business development but on the total enrichment of the environment: physical, economic, intellectual and cultural. We believe that this is what makes a community good for business, good for its people, and I hope that is the kind of future that will be built as a result of the start that has been made at this conference.

REPORT AND RECOMMENDATIONS THEME IV

Coping with the Social Impact of Economic Change

Mike Pennock
Former Executive Director, Social Planning and Research Council,
Hamilton and District

Most of the discussion on the issue of social impact centred around that sector of our community which is most involved: the social-service sector. The first session began with a discussion of some research done by Dr. David Tucker, of the McMaster School of Social Work. David had done an empirical test of a method for evaluating the social service system, using the Hamilton-Wentworth Social Service System as his sample. His conclusion was that, essentially, the social service system in Hamilton-Wentworth is well-organized, unfragmented, and well co-ordinated. The agencies work together and there is minimal duplication within the system. That brought us to the subject which dominated most of the sessions: that this very nice and fairly effective system is now entering into unknown territory.

First of all, the long-term chronic unemployment that has been often discussed at this conference is unprecedented. The development of the system we're talking about has largely occurred since the Second World War. The system itself was designed on the kind of assumptions that were popular during that time, which were that long-term, high rates of unemployment were probably a thing of the past. Most of the system was never really designed to deal with long-term chronic unemployment problems. We, therefore, have some structural problems. Concerns were also expressed throughout the sessions about what is the meaning of "leaner" and "meaner" social services. I think everybody who has been in the system for very long is learning to live with the lean part. But I think that the

mean part is still a bit of an unknown. There was discussion about resources to carry into this unknown territory with us and the general consensus, not too surprisingly, was that more resources are needed. At the same time, there was an understanding that the system itself has to look at re-allocating its resources to make sure that what it is doing still fits with this new territory we are entering into so that we're not taking an outdated system with us.

There was also recognition of a need within the social- service sector, as in any other sector, for considerable innovation. In our business, this means that we try out new modalities of care apart from the straight institutional models we tended to use in the past. The problem is that they are relatively untested and risky. The social service system, being politically-based as it is, tends to be somewhat reluctant to take risks, but that is something we're all going to have to deal with.

Another theme quite often expressed, particularly in the session that considered the disabled, was that there is a real fear among some groups like the disabled, who have made some modest gains in the past, that they will lose these gains in the coming years. For the average-employable disabled person 12 percent unemployment sounds just wonderful because the disabled tend to work under an unemployment rate of about 80 percent which actually is an improvement on ten years ago. It is not a big gain but it is an improvement, and there is a real concern that they will lose even that much as a result of the shakedown that we're going through.

Another point in that session was that high technology jobs or jobs within the knowledge sector are ideally suited for many disabled persons and, for the first time, the disabled really see a labour market opening up which fits their abilities. I suppose that makes them doubly nervous about losing ground that they have managed to establish over the last few years.

At almost every session, as social services people are apt to do, we discussed how to prevent problems. The obvious suggestion was that you create jobs. Many of the things we were hearing over the previous two days suggested that this is not going to be the answer. Some jobs will be created but there will be an increase in the number of those who don't have them. If you can't create jobs, how do you prevent the social impact, particularly the negative social impact, of unemployment that so many of the agencies have to deal with. At that point, we began talking about values. Jobs equal useful people. We define ourselves as useful people through the jobs we have and no job tends to be equated with a useless person. The process creates a lot of pain and that is one of the major factors that brings people in touch with social services. We asked ourselves if there is some way we can break that kind of causal chain that goes from no job, to uselessness, to pain, to social services. That, of course, means some kind of change in our values and our perception of work.

First of all, there are activities which are useful, alternate activities, very creative activities, that do exist outside of the paid labour force. A fair bit of discussion took place about those, or at least reduced, activities in the paid labour force, ranging from completely volunteer activities to part-time, flex-time, etc. People who are engaged in these activities do need an income. Probably out of all of our social service systems, the one that is least prepared for long-term chronic unemployment is our income maintenance system. This system was clearly designed on the assumption that we would never have long-term unemployment, and is, therefore, quite inadequate in terms of providing long-term incomes for unemployed people. A family of four on welfare receives, I believe, about $7,500. a year, which, I don't think anybody is going to argue, is a reasonable income. With that, the whole issue of income redistribution and how we redistribute it as painlessly as possible rose to the surface. It is an issue which we

have managed to keep to one side during the last 20 years of prosperity. Over the next 10 years it will, increasingly, become a public issue and it is going to have to be debated and discussed in a very real and sincere way. So many of the problems we are talking about, in terms of job loss, come from two sources one problem being lack of self-esteem, of feeling useless, and the other of not having an income.

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